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ABSTRACT

This study used data from 992 cases in 16 longitudinal studies of the Early Intervention Research Institute to evaluate five measures of family functioning: (1) Family Adaptability and Cohesion Evaluation Scale-III; (2) Family Support Scale; (3) Family Resources Scale; (4) Parenting Stress Index; and (5) Family Inventory of Life Events. Introductory information notes the need for research in this area and describes the methods used in data collection and analysis. For each of the five measures, data are generally provided on the following psychometric aspects: internal consistency and test-retest reliability; confirming structure; improving structure; confirming new structure and measuring invariance; normative data; and validity information. Extensive tables present detailed displays of the data. Five appendices provide additional descriptive statistical analysis of the five measures. (Contains 43 references.) (DB)

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**FAMILY FUNCTIONING IN FAMILIES OF CHILDREN
WITH DISABILITIES: AN INTENSIVE PSYCHOMETRIC
INVESTIGATION OF FIVE FAMILY MEASURES**

Contract #H023A30055

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IMPORTANCE

In 1986, Public Law 99-457 was passed and the stage was set for significant expansion of appropriate early intervention services for all young children with disabilities (Bailey & Wolery, 1992). This law emphasized the importance of family-based support and intervention (e.g., Bronfenbrenner, 1977; Ramey, McPhee, & Yeates, 1982). Although many researchers and practitioners have recognized the value of this philosophical shift to a family-centered approach (e.g., Adams, 1992; Bailey, 1987; Dunst, 1985), they have cautioned that moving to a family-centered approach will require assessing the needs of the family system, and not just those of the child. Unfortunately, we do not yet know much about family assessment related to structuring effective early intervention programs.

Most previous early intervention research has been primarily child focused and, consequently, information about the families of children involved in efficacy studies and the effects of intervention on the family have been ignored (Casto & Lewis, 1984). Most commonly the only family information collected has been demographic. Such data lacked the ability to describe salient aspects of family functioning identified in the literature as important, such as parental stress, family cohesiveness, and available support and resources (Casto & Mastropieri, 1986). As such, much of the information potentially pertinent to intervention and outcome evaluation has not been assessed (Dunst, Snyder, & Mankinen, 1989). This lack of information about the family and the effects of intervention on families has resulted, in part, because there have been very few well tested, psychometrically sound measures of family functioning available for use.

In response to the increased emphasis in early intervention on assessing family functioning, there has been substantial effort over the past 10 years to develop instruments that measure important aspects of family functioning with families of children with disabilities. A number of these instruments are now widely used in conjunction with early intervention programs. Measures such as the Family Adaptability and Cohesion Evaluation Scales (FACES-III; Olson, Portner, & Lavee, 1985) and the Comprehensive Evaluation of Family Functioning (CEFF; McLinden, 1990), have measured global family functioning. Other measures have focused on specific aspects of familial

and parental functioning. These include the Parenting Stress Index (PSI; Abidin, 1990), the Family Inventory of Life Events and Changes (FILE; McCubbin, Patterson, & Wilson, 1983), the Family Support Scale (FSS; Dunst, Jenkins, & Trivette, 1984), and the Family Resource Scale (FRS; Dunst & Leet, 1985), among others.

While the multitude of recently developed family measures have given researchers and clinicians a variety of instruments from which to choose, research on the quality of the scores derived from these instruments has lagged behind. Virtually all of the family measures lack sufficient psychometric information concerning reliability and validity to support their current usage. For instruments developed specifically for use with a population of families of children with disabilities, such as the Family Resource Scale, the limited psychometric information available in the literature has been based on extremely small, non-representative samples. For instruments that have undergone more rigorous psychometric analysis, such as the Parenting Stress Index, information is based on data collected primarily from traditional or "normal" populations. Thus, the interpretation of data from both types of instruments when they are used with families of children with disabilities is questionable.

Considering the importance of family functioning in current early intervention programs and the potential impact on the type of intervention delivered, further investigation of the psychometric properties of widely used measures of family functioning is essential. This need stems from two main sources. First, the Standards for Educational and Psychological Testing (AERA/APA/NCME, 1985) require that the reliability and validity of scores from measures be demonstrated with the population on which they are being used. Second, what is considered "abnormal" or problematic for a family without a child with a disability may be "normal" and adaptive for families with children having a disability (e.g., Fruge & Adams, 1992). For example, "overprotectiveness" with a child without a disability, may be responsible parenting for a child with a disability. Succinctly stated, assessments of score measurement integrity must occur in the context of specific intended uses.

Available Psychometric Information

Psychometric information available for each of the five family measures are presented in Table 1. As can be seen from Table 1, the information available for each of these measures is limited. This makes interpretation and decisionmaking on the basis of data from these instruments difficult. For two of the instruments, the PSI and the FACES-III, some additional psychometric information is available in the form of sample means and standard deviations that target families of children with disabilities. However, in all cases, the sample sizes for these studies were small, ranging from 20 to 84, with a mean sample size of 35 (e.g., Jenkins, 1982; Greenberg, 1983; Kazak & Marvin, 1984; Chavkin, 1986; McCubbin, 1989; Morrison & Zetlin, 1988; Cameron & Orr, 1989). Thus, the present project was aimed at increasing the availability of psychometric information on five commonly used measures of family functioning.

Table 1
Summary of Psychometric Information for Family Measures

Scale	Population	Norms	Concurrent		Construct Validity
			Validity	Reliability	
Parenting Stress Index (Abidin, 1990)	Normal	n = 2,633	Many studies cited*	n = 534 (.55 - .95)	n = 534
Family Adaptability and Cohesion Evaluation Scales (Olson et al., 1985)	Normal	n = 2,453	—	n = 2,412 (.62 - .77)	n = 1,206
Family Resource Scale (Dunst & Leet, 1987)	Variety of Disabilities	—	—	n = 52 (.94)	n = 52
Family Support Scale (Dunst et al., 1984)	Variety of Disabilities	n = 139	Questionnaire on Resources and Stress** (-.18 - -.14) (n = 139)	n = 139 (.77)	n = 139
Family Inventory of Life Events and Changes (Olson et al., 1985)	Normal	n = 980 Couples	—	n = 2,740 (.43 - .82)	n = 1,300

* e. g., Oppenheimer, 1986; Krauss et al., 1989; LaFiosca, 1981; Perez, 1989

** Holroyd, 1974

METHODS

Description of the Data

Data for the present project came from the Early Intervention Research Institute (EIRI) longitudinal studies. A full description of the early intervention studies conducted by EIRI can be found elsewhere (e.g., White & Mott, 1987; White et al., 1987). However, a brief overview of the data will be presented. The U.S. Department of Education awarded a contract to the Early Intervention Research Institute at Utah State University to investigate the efficacy and cost of early intervention programs for children with disabilities. EIRI conducted 16 longitudinal studies in various geographic locations with diverse populations. However, all of the studies had similar designs to protect the integrity of the data and, subsequently, of the conclusions that could be drawn from those data. Specifically, common features included:

- Random assignment to intervention and control groups
- Use of data collectors who were unaware of the purpose of the research and group membership of subjects
- Assessing a broad range of child and family functioning in line with a general systems model
- Verification of treatment implementation through self-evaluation and external monitoring at each research site
- Technical assistance provided to existing service providers allowing expansion or variety in types of early intervention services offered

The longitudinal studies were designed to maximize the integrity of the data and minimize common threats to internal and external validity. Thus, the data from EIRI provided an excellent opportunity to conduct further psychometric investigations on the measures used.

Data for the longitudinal studies was collected annually, beginning with pre-test data collected before the implementation of any treatment. The present project used data from both intervention and non-intervention groups since assignment should have no impact on the reliability or validity of the data. Although data were used from pretest and follow-up testings, the majority of data on which

initial analyses and normative information were based came from pretesting. Seventy-eight percent of data used were collected prior to intervention.

The EIRI data were made available to the project staff in the form of summary scores. Recoding of the data at the item level was necessary before any psychometric analyses could be conducted. To select the data to be recoded the following procedures were used:

- Subjects with a complete set of pre-test data (e.g., all five family measures were available) were selected
- For subjects without a complete set of pre-test data, data from the first follow-up testing (approximately at year 1 of the project) were selected if all five family measures had been completed
- For families with twins or triples involved in the research study, only responses for one child were included. Twin and triplet responses were not considered independent observations. These deletions were made randomly.

The selection procedures resulted in a sample of 922 cases with complete data. For approximately 78% of the cases, data came from the pre-testing with the remainder coming from the first follow-up testing. For convenience, the first set of data for all cases will be considered **Year 1**. To make use of the longitudinal data provided by the EIRI studies, subject data from the next two consecutive testings, if available, were also used and will be referred to as **Year 2** and **Year 3**, respectively.

Missing data. In recoding data at the item level, the issue of missing data must be considered. Although there has been much discussion about the "best" way to handle missing data, no clear consensus has been reached. In the case of the family measures, the authors of some of the instrument recommend a scoring strategy for dealing with unanswered items. For instance, with the PSI Abidin suggests that a score of "3" or "not sure" be assigned to missing items. Conversely, Dunst recommends that a score of "5" or "almost always adequate" be assigned to missing data on the FRS. Although this approach is helpful in scoring an individual protocol, it is may be less appropriate when structural analyses are to be conducted. An example may be illustrative. On the FSS one item asks about the support provided by schools and/or day cares. A number of parents left this item blank. Investigation of the demographic information reveals that in 79% of families the child with a disability was not in school and in 52% of families the child was not in day care. If an

extreme score were assigned to the missing data points, the item may appear to have poor item characteristics as an artifact of the sample under study. To avoid such a situation, a mean substitution approach was used for missing data.

A maximum cutoff for missing data on the PSI, FRS, FSS and FACES-III was identified. Subjects who exceeded the cutoff point for missing data on any single instrument were excluded from the sample. The FILE was not included in this process because a substantial portion of subjects had not completed the instrument at the Year 2 and Year 3 testings (37% at Year 2 and 53% at Year 3). Inclusion of the FILE would have resulted in a marked reduction in the sample available for analyses. Therefore, a consistent sample size was used for all analyses on the PSI, FRS, FSS, and FACES-III. The sample sizes for Year 1 and the longitudinal analyses are presented in Table 2.

Table 2

Sample Sizes For the PSI, FSS, FRS and FACES-III

	Sample Size (N)
Year 1 data available	922
Year 1 data <u>only</u>	345
Year 2 and Year 3 also	577
Year 1 and Year 2 <u>only</u>	208
Year 1 - Year 3 data	369

Description of the sample. Demographic data for the Year 1 sample (N = 922) are presented in Table 3 below. The child and family information indicate that the EIRI sample represents a diverse population of individuals and families with children having disabilities.

Table 3

Description of Sample

Demographic Characteristics	
Ethnicity	
Caucasian	84%
Asian American	1%
African American	10%
Hispanic American	2%
Native American	2%
Maternal Age	Mean = 29 SD = 7 Range = 13 to 50
Maternal Education (yrs)	Mean = 12.8 Range = 4 to 17
Maternal Marital Status	
Married	79%
Widowed	1%
Separated	6%
Divorced	5%
Single	9%
Paternal Age	Mean = 31 SD = 7 Range = 14 to 61
Paternal Education (yrs)	Mean = 13.2 Range = 4 to 19
Paternal Occupation	
Unemployed	11%
Technical	21%
Unskilled	23%
Professional	15%
Blue Collar	31%
Income (\$)	Mean = 23,000 SD = 16,000
Number of Siblings	Mean = 1.6 SD = 1.4 Range = 0 to 10
Characteristics of Children	
Age of Children at Assessment (months)	Mean = 29 SD = 19
Gender of Children	Male = 59% Female = 41%

(table continues)

Child Characteristics

Type of Disability	
Hearing Impaired	7%
Develop Delay	24%
Visually Impaired	5%
Multihandicapped	6%
Motor Impaired	4%
IVH	11%
Cognitively Impaired	7%
Down Syndrome	15%
Language Impaired	10%
Cerebral Palsy	5%
Health Impaired	4%
Other	2%

Developmental Functioning(DQ)

40 and below	16%
56 - 70	33%
41 - 55	20%
70 and above	31%

Description of Measures

Parenting Stress Index (PSI). The PSI consists of 120 items that measure stressors associated with parenting and being a parent. The scale is divided into three main subscales. The first two, child related stress and other related stress, are measured by 101 statements where the response scale is Likert and ranges from "strongly agree" to "strongly disagree." The third scale is 19 items in length and records the existence (or nonexistence) of life events during the last year.

The child-related stress scale covers stress related to the child that most concerns the respondent. This scale is further divided into six subscales: adaptability, acceptability, demandingness, mood, distractibility/hyperactivity, and reinforces parent. The other-related stress scale is also divided into subscales: depression, attachment, restrictions of role, sense of competence, social isolation, relationship with spouse, and parent health. The PSI yields scores for each subscale, the three main scales, and a total stress score which is the sum of the child- and other-related stress scores. Lower scores represents less stress. For the purposes of the present investigation, analyses were conducted using only the parent (other-related) and child domain

subscales. Analyses were not conducted on the 19 items comprising the life events checklist because no theoretically defensible structure is presumed to underlie such events.

Family Adaptability and Cohesiveness Scale (FACES-III). The FACES-III has 20 items that measure both the perceived and ideal adaptability and cohesion of the respondent's family. The test presents descriptive statements about family behaviors, attitudes, and feelings. Item responses are on a Likert scale with responses ranging from "almost never" to "almost always." Subjects are asked to complete the 20 items for how they perceive their families to actually be. For the Ideal scale, subjects are administered the same 20 items reworded to reflect how they would ideally like their family to be. The FACES-III yields a total score for both adaptability and cohesion on the perceived and ideal scales.

Family Resources Scale (FRS). The FRS is a 30 item questionnaire that measures the adequacy of time and economic resources for families with small children. Responses uses a Likert scale ranging from "not at all adequate" to "almost always adequate." The FRS has four subscales: general resources, time availability, physical resources, and external support. The FRS yields scores for each of the subscales and a total score, with higher scores indicating more resources for the respondent's family.

Family Support Scale (FSS). The FSS is an 18 item questionnaire that measures the amount of perceived support given to the parents of young children with disabilities. The FSS uses a Likert scale with responses ranging from "not at all helpful" to "extremely helpful." If an item, such as "Parent Groups," is not applicable for the respondent then nothing is marked and the response is judged "not applicable." The FSS measures support from family, friends, social groups, and professional service providers. Total scores, which may be used for each of the subscales as well as the overall score, are computed by adding up the Likert scores for the appropriate items within each scale. Higher scores indicate greater amounts of support.

Family Inventory of Life Events (FILE). The FILE is a questionnaire that measures the presence (or absence) of 71 life events that may have occurred over the last 12 months to blood relatives or those with whom the respondent has a long term commitment. The responses are all

dichotomous, with only "yes" (the life event or change occurred) or "no" (the life event or change did not occur) as choices. The life events are broken down into nine sections: intra-family strains, marital strains, pregnancy and childbearing strains, finance and business strains, work-family transition and strains, illness and family "care" strains, losses, transitions "in and out," and family legal violations. Thus, the FILE yields scores for each of these sections as well as a total score. These scores only reflect the number of items with a positive response, not the magnitude of the life event itself.

Analysis Procedure

The methodologies used in the present study comprise a means of establishing the three main indices of test usefulness: (1) reliability, (2) validity, and (3) normative data. Data analysis took place in six steps for each instrument: assessing the internal consistency and test-retest reliability of the data, confirming the proposed factor structure, improving on the factor structure using exploratory procedures (if necessary), confirming the new factor structure, developing normative tables for both the original and improved factor structures, and providing information on the concurrent validity of scores from each measure. Each of these steps will be reviewed.

Step 1: Internal consistency and test-retest reliability. The first step in investigating the psychometric properties of each instrument was to examine the reliabilities of the subscales and total scores. Internal consistency was computed as Cronbach coefficient alphas (Cronbach, 1951) and test-retest coefficients were calculated across one and two year intervals. These various coefficients were then compared to those reported in the literature for each instrument.

Step 2: Confirming structure. Confirmation of the structure determines whether the scales and subscales as presented by the author of the instrument "fit" the data from the EIRI sample. As was previously noted, most of the instruments involved in the present investigation were not developed on appropriately large samples of families with children with disabilities. Consequently, the reported structure of each measure requires verification and/or modification using a large, representative sample.

A confirmatory factor analysis using structural equation modeling with the LISREL program was conducted for the PSI, FSS, FRS, and FACES-III (the data from the FILE were not useful for this purpose since no particular structure is expected for life events). In all cases, the variance-covariance matrix was the basis of the analysis. The analysis of the variance-covariance matrix avoids the potential problems identified in the literature with analyzing a correlation matrix (Cudeck, 1989). Factor variances were consistently fixed to equal one.

The "fit" of the model to the data was evaluated using several techniques. The χ^2 statistic which measures the error in the model, was used as one estimate of fit. Interpretively, the χ^2 statistic is counterintuitive in that a statistically significant ($p < .05$) result means that the data does **not** fit the model. A null model χ^2 assuming complete independence of all observed measurements (e.g., each item is its own factor) was calculated as a baseline measure. Bentler (1992) notes that the "independence model is also a good baseline model against which other models can be evaluated for the gain in explanation that they achieve" (p. 92). However, several authors have highlighted the limitation of using the χ^2 statistic (e.g., Bentler, 1992; Byrne, 1989, 1994; Jöreskog, 1993; Loehlin, 1992) and several other estimates of fit have been developed. Byrne (1989) suggests that a χ^2/df ratio ≤ 2.00 indicates an acceptable fit to the data. The goodness-of-fit index (GFI) and adjusted goodness-of-fit index (AGFI) were also used to assess the fit of the model to the data. Interpretively, goodness-of-fit values $> .90$ suggests a psychometrically acceptable fit to the data. Finally the Root Mean Square Residual (RMR) was considered in assessing model fit, with a RMR $< .05$ suggesting an acceptable fit. Table 4 summarizes the indexes considered in assessing model fit for the present project and the values identified as acceptable for a "good" fit.

Step 3: Improving structure. If the original structure proposed by the author of the instrument was not confirmed based on the criterion previously discussed, analyses were conducted to improve upon the factor structure. In modifying the factor structure of an instrument, the following a priori guidelines were identified:

Table 4
Summary of Fit Indexes and Acceptable Values

Fit Index	Desired Value
χ^2 statistic	statistically significant ($p < .05$)
χ^2/df ratio	< 2.00
Root Mean Residual (RMR)	$< .05$
Goodness-of-fit (GFI) Adjusted Goodness-of-fit (AGFI)	$> .90$

- Items from the instrument should be maintained if at all possible. This would allow modification of the scoring key of the published instrument, rather than changing the integrity of the instrument itself.
- Modifications should be made considering both statistical and clinical utility.
- The structure of the instrument proposed by the author should take precedence if two models are equivalent statistically and clinically.

Analyses to improve the structure of an instrument were conducted using exploratory covariance structure analysis (i.e., structural equation modeling) on a subsample of the data ($n = 345$). As noted in Table 2 (p .6), these data comprised a natural "holdout" sample, for which longitudinal data were not available. Modification indexes provided by LISREL-7 and clinical judgement were used to guide the exploratory process. The indexes of fit previously discussed (GFI, AGFI, χ^2 , χ^2/df , and RMR) were used to assess the fit of each model. Additionally, t-values of the individual parameters, standard errors, and standardized residuals were considered. In judging whether or not a modification has made a substantial improvement in the model, Byrne (1989) notes that model improvement can be assessed by considering the change in χ^2 . She states that "since $\Delta\chi^2$ is distributed as χ^2 with degrees of freedom equal to the difference in degrees of freedom between the two models, the significance of this value can be tested statistically" (pp. 58-59).

Step 4: Confirming new structure and measuring invariance. It has been documented that post hoc model fitting is exploratory and capitalizes on sampling error. Therefore, confirmation of the new model with an independent sample is essential. As Jöreskog (1993) suggests,

The last model estimated in the previous step (exploratory analyses) should be one that fits the data of the sample reasonably well and in which all parameters are meaningful and substantively interpretable. However, this does not necessarily mean that it is the "best" model, because its results may have been obtained to some extent by "capitalizing on chance." The model modification process may have generated several "reasonable models" that should be cross-validated on independent data. (p. 313)

The "best" model identified in Step 3 was confirmed with an independent sample, the remaining cases with Year 1 data available ($n = 577$). The factor parameter estimates generated from the $n = 345$ sample were fit to the new *independent* sample ($n = 577$) to estimate the likely stability of the model. Such tests are the ultimate evaluation of result replicability.

Finally, the longitudinal stability of the improved model was assessed by fitting estimated parameters across Year 1 and Year 2 simultaneously ($n = 369$), and also across all three years ($n = 208$) simultaneously. Fit indexes were used to assess whether the model was stable over the identified time frame. It is important to note that subjects used to test invariance included no subjects used to generate the models being tested.

Internal consistency using Cronbach coefficient alphas were also be computed for each of the subscales and the total scores for each measure using the modified structure. Test-retest reliabilities were also be computed across one and two year time intervals using new scoring suggested by the structural analyses.

Step 5: Establishing norms. Because these analyses were completed with a unique population, a full description of normative data will immensely help future users to better interpret their data. Normative data is essential for the accurate interpretation of test data because such data indicate how typical or atypical a score is. These norms are reported as means, standard deviations, and percentile scores for both the original instrument and for any modifications presented. Previous norms have simply been too limited.

The distribution of scores for each instrument were compared to the norms established by the original authors of the measures, where available and appropriate. This provides an indication of whether the sample used in the present study differed on the constructs measured from the sample on which the test was originally normed. If the samples are appreciably different, then test users must interpret data from the instrument using population-specific norms.

Step 6: Establishing validity. Data regarding the validity of scores for each measure, modified and unmodified, were assessed through calculating concurrent validity coefficients. Concurrent validity coefficients are correlations with other tests hypothesized to measure constructs that both overlap and do not overlap with the test construct measured. This information establishes how well a test measures what it purports to measure, and its ability to discriminate the construct being measured from other constructs.

Concurrent validity was measured by computing convergent and divergent validity coefficients. These correlations were investigated using the various subscales in the five family measures. These analyses help establish the degree to which these scales overlap and measure similar constructs, and the degree to which these scales split and measure unique constructs. Concurrent validity coefficients were computed for the instruments as originally structured by the author and for alternative models developed in Steps 3 and 4.

In each of the subsequent sections, results are presented for each instrument following the analytic strategy outlined here. That is, the subsections for each instrument are: (a) internal consistency and test-retest reliability, (b) confirming structure, (c) improving structure, (e) confirming new structure and measuring invariance, (e) normative data, (f) validity information.

Family Adaptability and Cohesion Evaluation Scale - III

Descriptive data for the FACES-III at Year 1 and the variance-covariance matrices on which structural analyses were based are presented in Technical Appendix A. These matrices may be employed for further analyses by interested readers or to replicate the present results.

Internal Consistency and Test-Retest Reliability

Estimates of internal consistency and test-retest reliability for the FACES-III perceived and ideal scales were consistent with those presented previously in the literature. The results from the present study are summarized in Tables 5 and 6.

Table 5
Internal Consistency Reliability of FACES-III Data

FACES-III Scale	Internal Consistency Coefficient
Perceived Adaptability	.69
Perceived Cohesion	.82
Ideal Adaptability	.72
Ideal Cohesion	.83

Table 6
Test-Retest Reliability Coefficients for FACES-III Data

FACES-III Scale	Year1-Year2	Year1-Year3	Year2-Year3
Perceived Adaptability	.48	.40	.59
Perceived Cohesion	.55	.59	.59
Ideal Adaptability	.52	.49	.53
Ideal Cohesion	.48	.45	.48

Confirming Structure

Confirmation of the author's proposed factor structure of the FACES-III began with the estimation of a null model. The null model assumes complete independence of all observed measurements. Essentially, this means that each item of the instrument is considered to be its own factor. The null model fit statistics are a baseline from which to further judge future models (Bentler, 1992). Fit statistics for the null model were as follows:

- $\chi^2 = 12,460.84$ ($p < .001$)
- $\chi^2/df = 14.8$ ($df = 840$)
- GFI = .399
- AGFI = .368
- RMR = .193

Fit statistics for the four factor model (perceived cohesion, perceived adaptability, ideal cohesion, ideal adaptability) assuming that the FACES-III was a *single instrument with four scales* were as follows:

- $\chi^2 = 4,521.77$ ($p < .001$)
- $\chi^2/df = 6.1$ ($df = 734$)
- GFI = .781
- AGFI = .756
- RMR = .087

Although the four factor model resulted in a noteworthy improvement in fit, there is misspecification in the model. Since the FACES-III is identified as having two separate scales, perceived and ideal, an alternative a priori model was tested in which two 2-factor models were proposed. For the Perceived Scales, the null model χ^2 was 4,206.60 ($df = 190$). Fit statistics for the 2-factor Perceived Scale model were as follows:

- $\chi^2 = 928.31$ ($p < .001$)
- $\chi^2/df = 5.5$ ($df = 169$)
- GFI = .898
- AGFI = .873
- RMR = .083

For the Ideal Scales, the null model χ^2 was 5,138.59 ($df=190$). Fit statistics for the 2-factor Ideal Scale model were:

- $\chi^2 = 1,135.63$ ($p < .001$)
- $\chi^2/df = 6.7$ ($df = 169$)
- GFI = .882
- AGFI = .853
- RMR = .088

Although considering the FACES-III as two independent scales resulted in a substantially improved fit between the data and the model, the fit statistics and χ^2 values suggest some continued model misspecification. Thus, analyses continued with exploratory procedures.

Improving Structure

Perceived scale. Post-hoc model fitting was conducted on a subsample of the data ($n = 345$). As previously stated, these data comprised a natural "holdout" sample, for which longitudinal data were not available. For **Perceived scales**, a series of models were tested and modifications were made based on t-values, correlations among errors, and modification indices. High intercorrelations among item errors suggested the presence of a third factor. The "best" model identified had three factors. The three factor model is presented in Figure 1 and factor intercorrelations are presented in Table 7. Factor I remained essentially unchanged and is the Cohesion scale.

Table 7
Intercorrelations Between FACES-III Perceived Scales (Phi Matrix)

	Perceived Adaptability	Perceived Cohesion	Perceived Democratic Style
Perceived Adaptability	1.000		
Perceived Cohesion	.328	1.000	
Perceived Democratic Style	.440	.213	1.000

However, the FACES-III Perceived Adaptability Scale was divided into Factors II and III. Factor II maintained 6 of the 10 original items and continues to describe family adaptability. Four items were moved to a third Factor labeled Democratic Family Style. The items all involved the role of children in decision-making. Specifically, "Children have a say in their discipline," "In solving problems, the children's suggestions are followed," "Children make the decisions in our family," and "Parents and children discuss punishment together." This factor appears to represent the democratic family style discussed in the family literature (e.g., Bloom, 1985; Minuchin, 1974). In addition, two error terms were allowed to correlate to improve the fit of the model. The three factor model, presented in Figure 1, had the following fit statistics:

- $\chi^2 = 309.69$ ($p < .001$)
- $\chi^2/df = 1.9$ ($df = 165$)
- GFI = .922
- AGFI = .901
- RMR = .069

The improved model showed a noteworthy, and statistically significant, improvement on all fit indexes and suggests that the three factor model provided an adequate fit to the data.

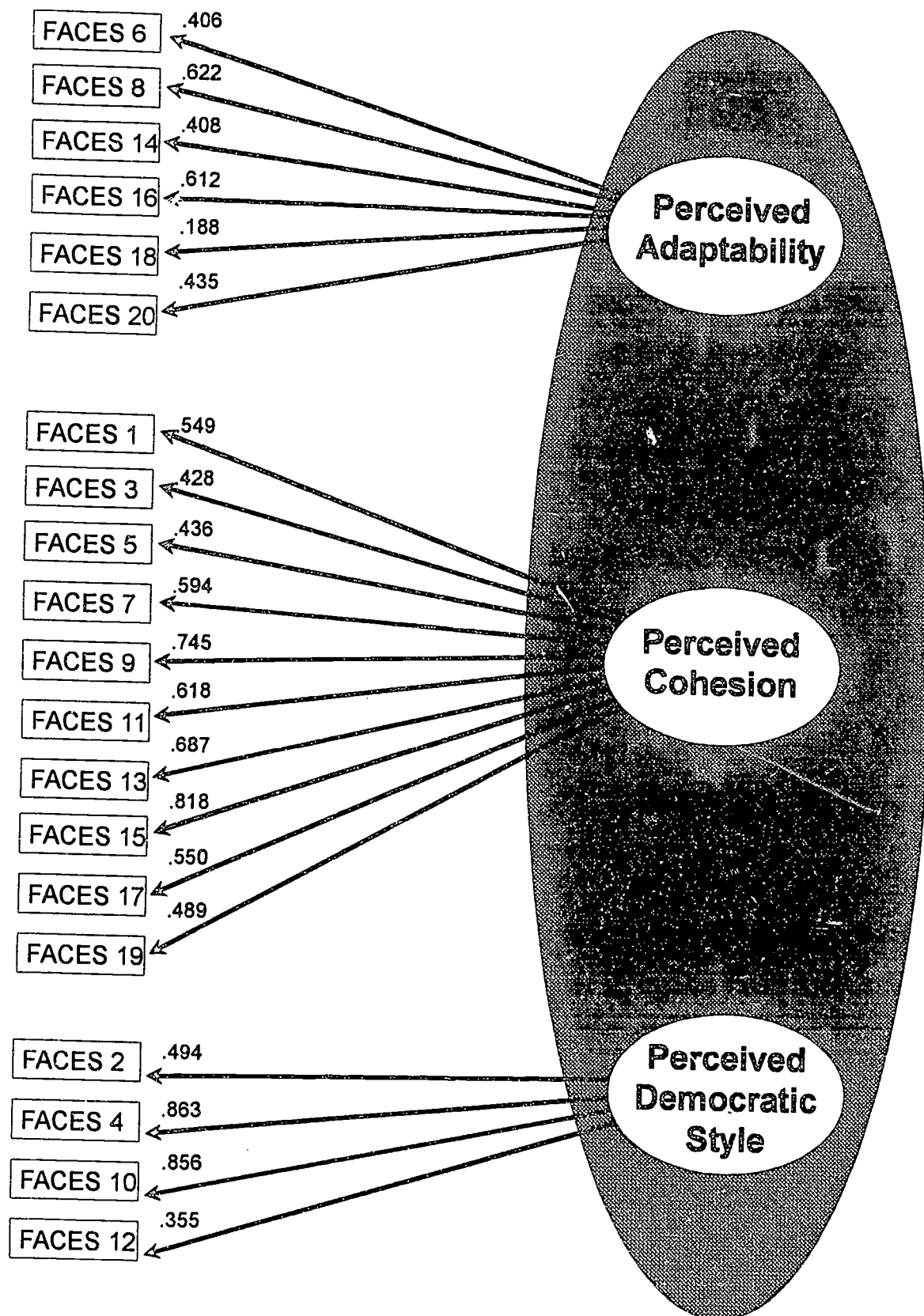


Figure 1. Structural Models for the FACES-III Perceived Scales

Note: Dark circle indicates all factors are correlated. The Phi matrix is presented in table 7.

Ideal scale. Exploratory analyses were also conducted on the **Ideal Scale** of the FACES-III using similar techniques. A series of models were tested using the subsample ($n = 345$) and a three factor model was again identified as "best." Figure 2 and Table 8 present the path values and factor correlations for this model. The composition of these factors, however, was somewhat different from those identified in the analysis of the Perceived Scale. The Cohesion Scale consisted of all the items originally proposed by the author with the addition of two items, "We would know who the leader(s) was in our family" and "We could tell who does which household chores." These two items were originally identified by the author to be on the Adaptability Scale. Nevertheless, both items fit better with the Cohesion Scale and analysis of the item content supported the move of the items. Specifically, the new third scale, Adaptability Scale, focused on change within the family, while item content on the Cohesion Scale focused on family roles and use of free time.

Table 8
Intercorrelations Between FACES-III Ideal Scales (Phi Matrix)

	Ideal Adaptability	Ideal Cohesion	Ideal Democratic Style
Ideal Adaptability	1.000		
Ideal Cohesion	.276	1.000	
Ideal Democratic Style	.613	.381	1.000

The Adaptability Scale consisted of four items focusing on change within the family. The items included "Different persons would act as leaders in our family," "Our family would change its way of handling tasks," "Rules would change in our family," and "We would shift household responsibilities from person to person." Similar to findings with the Cohesion Scale, the third factor included four items targeting discipline and the children's role within the family. One error term was allowed to correlate to improve the fit of the model. Fit statistics for the three factor solution presented in Figure 2 were as follows:

- o $\chi^2 = 361.03$ ($p < .001$)
- o $\chi^2/df = 2.2$ ($df = 165$)
- o GFI = .905
- o AGFI = .880
- o RMR = .065

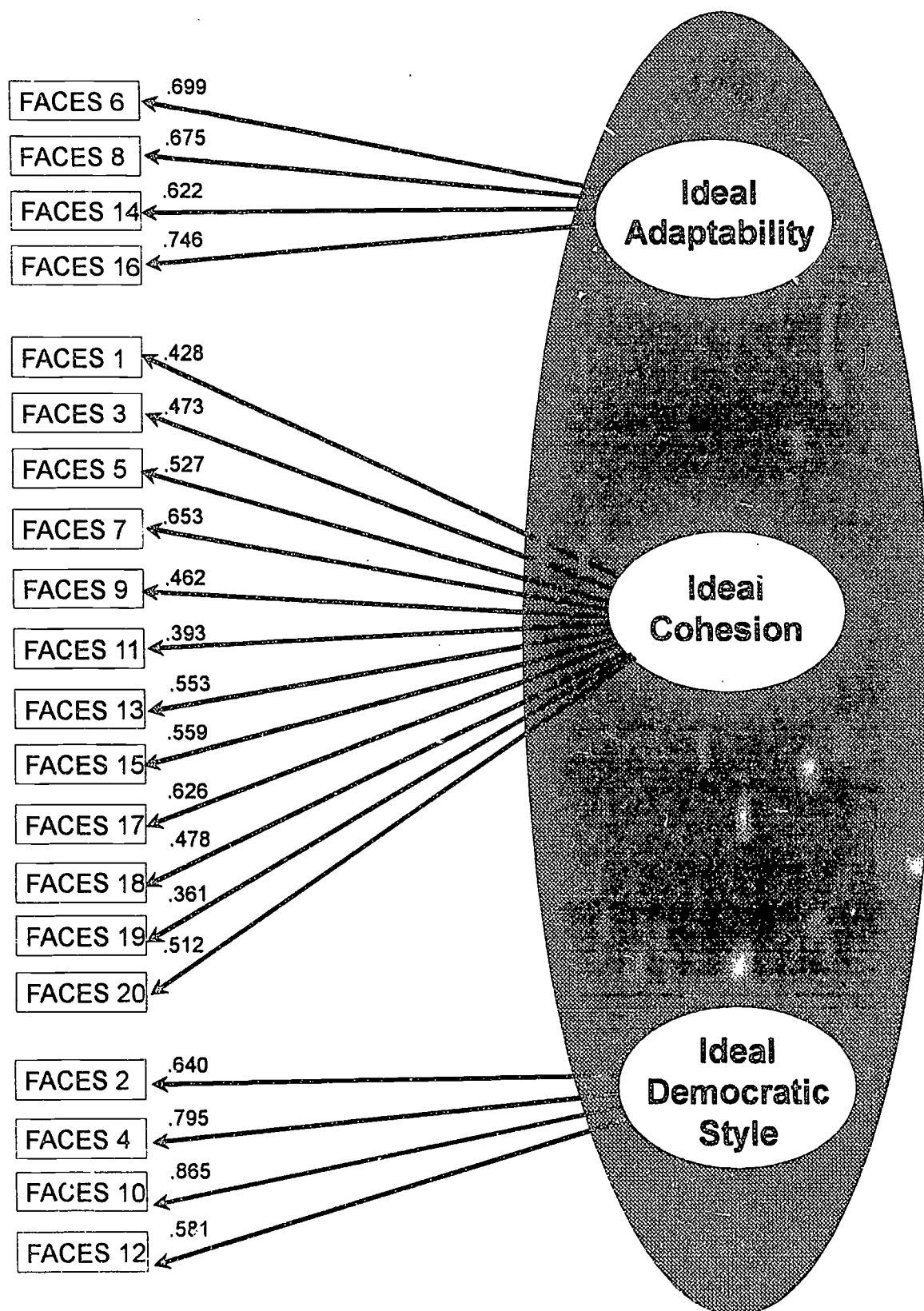


Figure 2. Structural Models for the FACES-III Ideal Scales

Note: Dark circle indicates all factors are correlated. The Phi matrix is presented in table 8.

As can be seen, the data fit the model acceptably. However, the fit for the ideal scale was not as good as that found for the Perceived Scale. Further attempts to improve model fit were judged to be "overworking" the data. A summary of item content for each scale is presented in Table 9.

Confirming New Structure and Measuring Invariance

Confirming structure. Of course, post hoc model fitting is exploratory and capitalizes on sampling error. As has been previously emphasized, the true test of a "good" model is its replicability with an independent sample. Thus, the three factor models for the Perceived and Ideal Scales were replicated with an independent sample, the remainder of the Year 1 data ($n = 577$). The parameter estimates generated with the $n = 345$ sample were fit to the new sample (e.g., all λ were constrained).

The three factor model for the Perceived Scale with the path values constrained resulted in the following fit statistics:

- $\chi^2 = 601.50$ ($p < .001$)
- $\chi^2/df = 3.2$ ($df = 185$)
- GFI = .903
- AGFI = .890
- RMR = .097

As would be expected, there was some decrease in fit statistics and an increase in the χ^2 value.

However, the fit statistics and χ^2 value suggested that the model provided an acceptable fit to the data.

The 3 Factor model for the Ideal Scale with the path values constrained resulted in the following fit statistics:

- $\chi^2 = 619.54$ ($p < .001$)
- $\chi^2/df = 3.3$ ($df = 185$)
- GFI = .899
- AGFI = .885
- RMR = .081

Again, the Ideal Scale did not replicate as well as the Perceived Scale. However, the fit statistics still suggested a relatively good fit of the model to the data.

Table 9
Modified FACES-III Scales

FACES-III Scale	Item Number and Content
Perceived Scales	
Cohesion	1. Family members ask each other for help 3. We approve of each other's friends 5. We like to do thing with just family 7. Family member feel closer to family than others 9. Family members spend free time together 11. Family members feel very close 13. When family gets together, everyone is present 15. We can easily think of things to do as a family 17. Family members consult other family members on their decisions 19. Family togetherness is important
Adaptability	6. Different persons act as leaders 8. Our family changes its way of handling tasks 14. Rules change in our family 16. We shift household responsibilities 18. It is hard to identify the leader in our family 20. It is hard to tell who does which household chore
Democratic Style	2. In solving problems, children's suggestions are followed 4. Children have a say in their discipline 10. Parents and children discuss punishment together 12. The children makes the decisions in our family
Ideal Scales	
Cohesion	21. Family members would ask each other for help. 23. We would approve of each other's friends 25. We would like to do things with just our immediate family 27. Family members would feel closer to each other than to people outside the family 29. Family members would spend free time together 31. Family members would be very close 33. When family was together, everyone would be present 35. We could easily think of things to do together as a family 37. Family members would consult each other on decisions 38. We would know who the leader was 39. Family togetherness would be very important 40. We could tell who does which household chores
Adaptability	26. Different persons would act as leaders 28. Our family would change its way of handling tasks 34. Rules would change in our family 36. We would shift household responsibility
Democratic Style	22. In solving problems, children's suggestions would be followed. 24. Children would have a say in discipline. 30. Parents and children would discuss punishment together 32. Children would make decisions in our family

Invariance analyses for perceived scale. The three factor model for the Perceived Scale was also tested for invariance across time. A subset of the sample for which only Year 1 and Year 2 data were available ($n = 208$) was used to assess the stability of the model across a one year time period. The subjects used to test invariance included no subjects used to generate the models being tested, as indicated in Table 2 (p. 6).

The analyses were conducted by simultaneously testing for invariance across groups, specifically focusing on the factor loadings. The model was constrained such that the λ matrix (factor loadings) was invariant over groups. Specifically, all parameter matrices had the same pattern of fixed and free elements and that all free elements in the first group are equal across groups (SPSS, 1993). Fit statistics for the analyses across one year were:

- $\chi^2 = 666.45$ ($p < .001$)
- $\chi^2/df = 1.9$ ($df = 350$)
- GFI = .850
- RMR = .099

A similar analyses was conducted across two years using a subset of the sample for which all three data points were available ($n = 369$). Again the λ matrix was constrained to be invariant across all three time periods. The fit statistics were:

- $\chi^2 = 1316.47$ ($p < .001$)
- $\chi^2/df = 2.4$ ($df = 535$)
- GFI = .899
- RMR = .071

The results of the confirmatory and invariance analyses suggest that the three factor model identified for the FACES-III Perceived Scale appears to be psychometrically sound. Although the fit statistics decreased with the invariance analyses, the model still performed well even over a two year time period.

Invariance analysis for ideal scale. The three factor model for the Ideal Scale was also tested for invariance across time. Using a same subset of the data ($n = 208$). The analyses were conducted by simultaneously testing for invariance across groups, specifically focusing on the factor

loadings. The model again was constrained such that the λ matrix (factor loadings) was invariant over groups. Fit statistics for the analyses across one year were as follows:

- $\chi^2 = 614.14$ ($p < .001$)
- $\chi^2/df = 1.7$ ($df = 350$)
- GFI = .882
- RMR = .073

A similar analyses was conducted across two years using a subset of the sample for which all three data points were available ($n = 369$). Again the λ was constrained to be invariant across all three time periods. Fit statistics were:

- $\chi^2 = 1154.28$ ($p < .001$)
- $\chi^2/df = 2.2$ ($df = 535$)
- GFI = .922
- RMR = .058

The results of the confirmatory and invariance analyses suggest that the three factor model identified for the FACES-III Ideal Scale appears to be psychometrically sound. Interestingly, although the fit statistics for the Ideal Scale were generally lower than those for the Perceived Scale, the Ideal Scale replicated better over time.

Estimates of internal consistency and test-retest reliability for the Modified FACES-III scales were calculated. The results from these analyses are presented in Tables 10 and 11.

Table 10
Internal Consistency Reliability of Modified FACES-III Data

FACES-III Scale	Internal Consistency Coefficient
Perceived Adaptability	.60
Perceived Cohesion	.82
Perceived Democratic Family Style	.75
Ideal Adaptability	.62
Ideal Cohesion	.81
Ideal Democratic Family Style	.77

Table 11

Test-Retest Reliability Coefficients for Modified FACES-III Data

FACES-III Scale	Year 1-Year 2	Year 1 - Year 3	Year 2 - Year 3
Perceived Adaptability	.39	.35	.48
Perceived Cohesion	.55	.59	.59
Perceived Democratic Family Style	.51	.45	.62
Ideal Adaptability	.47	.41	.45
Ideal Cohesion	.48	.48	.54
Ideal Democratic Family Style	.53	.56	.67

Normative Data

Percentile ranks and descriptive statistics for the four original FACES-III scales are presented in Tables 12-16. Percentiles were calculated on the full sample of 922 subjects. Because these data are unique in their breadth and diversity, the normative data presented should be used when interpreting scores from families having children with disabilities.

Table 12

Percentile Ranks for FACES-III, Perceived Cohesion

Percentile	Value	Percentile	Value	Percentile	Value
1.00	19.000	2.00	22.460	3.00	24.690
4.00	26.000	5.00	27.150	6.00	28.000
7.00	29.000	8.00	30.000	9.00	30.000
10.00	31.000	11.00	31.000	12.00	32.000
13.00	32.000	14.00	32.000	15.00	33.000
16.00	33.000	17.00	33.000	18.00	34.000
19.00	34.000	20.00	34.000	21.00	35.000
22.00	35.000	23.00	35.000	24.00	35.520
25.00	36.000	26.00	36.000	27.00	36.000
28.00	37.000	29.00	37.000	30.00	37.000
31.00	37.000	32.00	37.000	33.00	37.000
34.00	38.000	35.00	38.000	36.00	38.000
37.00	38.000	38.00	39.000	39.00	39.000
40.00	39.000	41.00	39.000	42.00	39.600
43.00	39.000	44.00	40.000	45.00	40.000
46.00	40.000	47.00	40.000	48.00	40.000
49.00	40.000	50.00	40.000	51.00	41.000
52.00	41.000	53.00	41.000	54.00	41.000
55.00	41.000	56.00	41.000	57.00	41.000
58.00	41.000	59.00	42.000	60.00	42.000
61.00	42.000	62.00	42.000	63.00	42.000
64.00	42.000	65.00	42.000	66.00	43.000
67.00	43.000	68.00	43.000	69.00	43.000
70.00	43.000	71.00	43.000	72.00	43.560
73.00	44.000	74.00	44.000	75.00	44.000
76.00	44.000	77.00	44.000	78.00	44.000
79.00	45.000	80.00	45.000	81.00	45.000
82.00	45.000	83.00	45.000	84.00	45.000
85.00	46.000	86.00	46.000	87.00	46.000
88.00	46.000	89.00	46.000	90.00	46.000
91.00	47.000	92.00	47.000	93.00	47.000
94.00	47.000	95.00	48.000	96.00	48.000
97.00	48.000	98.00	49.000	99.00	49.000

N = 922

Table 13

Percentile Ranks for FACES-III, Perceived Adaptability

Percentile	Value	Percentile	Value	Percentile	Value
1.00	12.000	2.00	12.000	3.00	13.888
4.00	14.000	5.00	14.000	6.00	15.000
7.00	15.000	8.00	15.000	9.00	16.000
10.00	16.000	11.00	16.000	12.00	17.000
13.00	17.000	14.00	17.000	15.00	17.000
16.00	17.000	17.00	18.000	18.00	18.000
19.00	18.000	20.00	18.000	21.00	18.000
22.00	19.000	23.00	19.000	24.00	19.000
25.00	19.000	26.00	19.000	27.00	19.000
28.00	19.625	29.00	20.000	30.00	20.000
31.00	20.000	32.00	20.000	33.00	20.000
34.00	20.935	35.00	21.000	36.00	21.000
37.00	21.000	38.00	21.000	39.00	21.000
40.00	21.330	41.00	22.000	42.00	22.000
43.00	22.000	44.00	22.000	45.00	22.000
46.00	22.000	47.00	23.000	48.00	23.000
49.00	23.000	50.00	23.000	51.00	23.000
52.00	23.000	53.00	23.642	54.00	24.000
55.00	24.000	56.00	24.000	57.00	24.000
58.00	24.000	59.00	25.000	60.00	25.000
61.00	25.000	62.00	25.000	63.00	25.000
64.00	26.000	65.00	26.000	66.00	26.000
67.00	26.000	68.00	26.000	69.00	26.000
70.00	26.000	71.00	26.330	72.00	27.000
73.00	27.000	74.00	27.000	75.00	27.000
76.00	27.000	77.00	27.000	78.00	28.000
79.00	28.000	80.00	28.000	81.00	28.000
82.00	28.000	83.00	29.000	84.00	29.000
85.00	29.000	86.00	30.000	87.00	30.000
88.00	30.000	89.00	30.000	90.00	31.000
91.00	31.000	92.00	31.000	93.00	31.620
94.00	32.000	95.00	32.000	96.00	33.000
97.00	34.000	98.00	35.000	99.00	37.254

N = 922

Table 14

Percentile Ranks for FACES-III, Ideal Cohesion

Percentile	Value	Percentile	Value	Percentile	Value
1.00	25.000	2.00	28.000	3.00	29.000
4.00	31.000	5.00	32.000	6.00	33.000
7.00	34.000	8.00	35.000	9.00	36.000
10.00	36.000	11.00	37.000	12.00	37.000
13.00	38.000	14.00	38.000	15.00	39.000
16.00	39.000	17.00	39.000	18.00	39.000
19.00	40.000	20.00	40.000	21.00	40.000
22.00	40.060	23.00	41.000	24.00	41.000
25.00	41.000	26.00	41.000	27.00	41.000
28.00	42.000	29.00	42.000	30.00	42.000
31.00	42.000	32.00	42.000	33.00	42.000
34.00	42.000	35.00	42.050	36.00	43.000
37.00	43.000	38.00	43.000	39.00	43.000
40.00	43.000	41.00	43.000	42.00	43.000
43.00	44.000	44.00	44.000	45.00	44.000
46.00	44.000	47.00	44.000	48.00	44.000
49.00	44.000	50.00	45.000	51.00	45.000
52.00	45.000	53.00	45.000	54.00	45.000
55.00	45.000	56.00	45.000	57.00	45.000
58.00	45.000	59.00	46.000	60.00	46.000
61.00	46.000	62.00	46.000	63.00	46.000
64.00	46.000	65.00	46.000	66.00	46.000
67.00	46.000	68.00	46.000	69.00	46.000
70.00	47.000	71.00	47.000	72.00	47.000
73.00	47.000	74.00	47.000	75.00	47.000
76.00	47.000	77.00	47.000	78.00	48.000
79.00	48.000	80.00	48.000	81.00	48.000
82.00	48.000	83.00	48.000	84.00	48.000
85.00	48.000	86.00	48.000	87.00	48.000
88.00	48.000	89.00	49.000	90.00	49.000
91.00	49.000	92.00	49.000	93.00	49.000
94.00	49.000	95.00	50.000	96.00	50.000
97.00	50.000	98.00	50.000	99.00	50.000

N = 922

Table 15

Percentile Ranks for FACES-III, Ideal Adaptability

Percentile	Value	Percentile	Value	Percentile	Value
1.00	16.230	2.00	18.000	3.00	19.000
4.00	20.000	5.00	21.000	6.00	21.000
7.00	21.000	8.00	22.000	9.00	22.000
10.00	22.000	11.00	23.000	12.00	23.000
13.00	23.000	14.00	24.000	15.00	24.000
16.00	24.000	17.00	25.000	18.00	25.000
19.00	25.000	20.00	25.000	21.00	26.000
22.00	26.000	23.00	26.000	24.00	26.000
25.00	26.000	26.00	27.000	27.00	27.000
28.00	27.000	29.00	27.000	30.00	27.000
31.00	28.000	32.00	28.000	33.00	28.000
34.00	28.000	35.00	28.000	36.00	28.000
37.00	28.000	38.00	28.000	39.00	29.000
40.00	29.000	41.00	29.000	42.00	29.000
43.00	29.000	44.00	29.000	45.00	29.351
46.00	30.000	47.00	30.000	48.00	30.000
49.00	30.000	50.00	30.000	51.00	30.000
52.00	31.000	53.00	31.000	54.00	31.000
55.00	31.000	56.00	31.000	57.00	31.000
58.00	32.000	59.00	32.000	60.00	32.000
61.00	32.000	62.00	32.000	63.00	32.000
64.00	32.000	65.00	33.000	66.00	33.000
67.00	33.000	68.00	33.000	69.00	33.000
70.00	34.000	71.00	34.000	72.00	34.000
73.00	34.000	74.00	34.000	75.00	34.000
76.00	35.000	77.00	35.000	78.00	35.000
79.00	35.000	80.00	35.000	81.00	36.000
82.00	36.000	83.00	36.000	84.00	36.000
85.00	36.550	86.00	37.000	87.00	37.000
88.00	37.000	89.00	37.000	90.00	38.000
91.00	38.000	92.00	38.160	93.00	39.000
94.00	39.620	95.00	40.000	96.00	41.000
97.00	41.037	98.00	43.540	99.00	45.000

N = 922

Table 16

Descriptive Statistics for FACES-III Scales

FACES-III Scale	Mean	Std. Dev.
Perceived Adaptability	23.26	5.69
Perceived Cohesion	39.29	6.30
Ideal Adaptability	30.34	5.99
Ideal Cohesion	43.31	5.34

Percentile ranks for the modified three factor scoring for the FACES-III scales are presented in Tables 17-23. These percentile ranks reflect the modified scoring and addition of the third factor. These data should be used interpretively for the modified scoring and is recommended for use with families have children with disabilities.

Table 17

Percentile Ranks for FACES-III Modified Scoring, Perceived Cohesion

Percentile	Value	Percentile	Value	Percentile	Value
1.00	19.000	2.00	22.460	3.00	24.690
4.00	26.000	5.00	27.150	6.00	28.000
7.00	29.000	8.00	30.000	9.00	30.000
10.00	31.000	11.00	31.000	12.00	32.000
13.00	32.000	14.00	32.000	15.00	33.000
16.00	33.000	17.00	33.000	18.00	34.000
19.00	34.000	20.00	34.000	21.00	35.000
22.00	35.000	23.00	35.000	24.00	35.520
25.00	36.000	26.00	36.000	27.00	36.000
28.00	37.000	29.00	37.000	30.00	37.000
31.00	37.000	32.00	37.000	33.00	37.000
34.00	38.000	35.00	38.000	36.00	38.000
37.00	38.000	38.00	39.000	39.00	39.000
40.00	39.000	41.00	39.000	42.00	39.000
43.00	39.000	44.00	40.000	45.00	40.000
46.00	40.000	47.00	40.000	48.00	40.000
49.00	40.000	50.00	40.000	51.00	41.000
52.00	41.000	53.00	41.000	54.00	41.000
55.00	41.000	56.00	41.000	57.00	41.000
58.00	41.000	59.00	42.000	60.00	42.000
61.00	42.000	62.00	42.000	63.00	42.000
64.00	42.000	65.00	42.000	66.00	43.000
67.00	43.000	68.00	43.000	69.00	43.000
70.00	43.000	71.00	43.000	72.00	43.560
73.00	44.000	74.00	44.000	75.00	44.000
76.00	44.000	77.00	44.000	78.00	44.000
79.00	45.000	80.00	45.000	81.00	45.000
82.00	45.000	83.00	45.000	84.00	45.000
85.00	46.000	86.00	46.000	87.00	46.000
88.00	46.000	89.00	46.000	90.00	46.000
91.00	47.000	92.00	47.000	93.00	47.000
94.00	47.000	95.00	48.000	96.00	48.000
97.00	48.000	98.00	49.000	99.00	49.000

N = 922

Table 18

Percentile Ranks for FACES-III Modified Scoring, Perceived Adapatability

Percentile	Value	Percentile	Value	Percentile	Value
1.00	6.000	2.00	7.000	3.00	7.000
4.00	7.000	5.00	8.000	6.00	8.000
7.00	8.000	8.00	8.000	9.00	9.000
10.00	9.000	11.00	9.000	12.00	9.000
13.00	10.000	14.00	10.000	15.00	10.000
16.00	10.000	17.00	10.000	18.00	10.000
19.00	11.000	20.00	11.000	21.00	11.000
22.00	11.000	23.00	11.000	24.00	11.000
25.00	11.000	26.00	11.000	27.00	11.000
28.00	12.000	29.00	12.000	30.00	12.000
31.00	12.000	32.00	12.000	33.00	12.000
34.00	12.000	35.00	12.000	36.00	12.000
37.00	12.000	38.00	12.000	39.00	13.000
40.00	13.000	41.00	13.000	42.00	13.000
43.00	13.000	44.00	13.000	45.00	13.000
46.00	13.000	47.00	13.000	48.00	14.000
49.00	14.000	50.00	14.000	51.00	14.000
52.00	14.000	53.00	14.000	54.00	14.000
55.00	14.000	56.00	14.000	57.00	14.000
58.00	15.000	59.00	15.000	60.00	15.000
61.00	15.000	62.00	15.000	63.00	15.000
64.00	15.000	65.00	15.000	66.00	15.000
67.00	15.000	68.00	15.000	69.00	16.000
70.00	16.000	71.00	16.000	72.00	16.000
73.00	16.000	74.00	16.000	75.00	16.000
76.00	17.000	77.00	17.000	78.00	17.000
79.00	17.000	80.00	17.000	81.00	17.000
82.00	17.000	83.00	18.000	84.00	18.000
85.00	18.000	86.00	18.000	87.00	18.000
88.00	18.000	89.00	18.000	90.00	19.000
91.00	19.000	92.00	19.000	93.00	20.000
94.00	20.000	95.00	21.000	96.00	21.000
97.00	22.000	98.00	23.000	99.00	25.000

N = 922

Table 19

Percentile Ranks for FACES-III Modified Scoring, Perceived Democratic Family Style

Percentile	Value	Percentile	Value	Percentile	Value
1.00	4.000	2.00	4.000	3.00	4.000
4.00	4.000	5.00	4.000	6.00	4.000
7.00	4.000	8.00	4.000	9.00	5.000
10.00	5.000	11.00	5.000	12.00	5.000
13.00	5.000	14.00	5.000	15.00	5.640
16.00	6.000	17.00	6.000	18.00	6.000
19.00	6.000	20.00	6.000	21.00	6.000
22.00	7.000	23.00	7.000	24.00	7.000
25.00	7.000	26.00	7.000	27.00	7.000
28.00	7.000	29.00	7.000	30.00	7.000
31.00	8.000	32.00	8.000	33.00	8.000
34.00	8.000	35.00	8.000	36.00	8.000
37.00	8.000	38.00	8.000	39.00	8.000
40.00	8.000	41.00	9.000	42.00	9.000
43.00	9.000	44.00	9.000	45.00	9.000
46.00	9.000	47.00	9.000	48.00	9.000
49.00	9.330	50.00	9.330	51.00	9.330
52.00	10.000	53.00	10.000	54.00	10.000
55.00	10.000	56.00	10.000	57.00	10.000
58.00	10.000	59.00	10.000	60.00	10.000
61.00	10.037	62.00	11.000	63.00	11.000
64.00	11.000	65.00	11.000	66.00	11.000
67.00	11.000	68.00	11.000	69.00	11.000
70.00	11.000	71.00	11.000	72.00	11.000
73.00	11.000	74.00	12.000	75.00	12.000
76.00	12.000	77.00	12.000	78.00	12.000
79.00	12.000	80.00	12.000	81.00	12.000
82.00	12.000	83.00	12.000	84.00	13.000
85.00	13.000	86.00	13.000	87.00	13.000
88.00	13.000	89.00	13.000	90.00	13.000
91.00	14.000	92.00	14.000	93.00	14.000
94.00	14.000	95.00	15.000	96.00	15.000
97.00	15.000	98.00	16.000	99.00	16.770

N = 922

Table 20

Percentile Ranks for FACES-III Modified Scoring, Ideal Cohesion

Percentile	Value	Percentile	Value	Percentile	Value
1.00	30.230	2.00	33.000	3.00	36.000
4.00	37.000	5.00	38.150	6.00	40.000
7.00	41.000	8.00	42.000	9.00	42.000
10.00	43.000	11.00	44.000	12.00	44.000
13.00	44.990	14.00	45.000	15.00	46.000
16.00	46.000	17.00	46.000	18.00	47.000
19.00	47.000	20.00	47.000	21.00	48.000
22.00	48.000	23.00	48.000	24.00	48.000
25.00	49.000	26.00	49.000	27.00	49.000
28.00	49.000	29.00	49.000	30.00	49.000
31.00	50.000	32.00	50.000	33.00	50.000
34.00	50.000	35.00	50.000	36.00	50.000
37.00	51.000	38.00	51.000	39.00	51.000
40.00	51.000	41.00	51.000	42.00	51.000
43.00	51.000	44.00	52.000	45.00	52.000
46.00	52.000	47.00	52.000	48.00	52.000
49.00	52.000	50.00	52.500	51.00	53.000
52.00	53.000	53.00	53.000	54.00	53.000
55.00	53.000	56.00	53.000	57.00	53.000
58.00	54.000	59.00	54.000	60.00	54.000
61.00	54.000	62.00	54.000	63.00	55.000
64.00	55.000	65.00	55.000	66.00	55.000
67.00	55.000	68.00	55.000	69.00	55.000
70.00	55.000	71.00	55.000	72.00	56.000
73.00	56.000	74.00	56.000	75.00	56.000
76.00	56.000	77.00	56.000	78.00	56.000
79.00	56.000	80.00	57.000	81.00	57.000
82.00	57.000	83.00	57.000	84.00	57.000
85.00	57.000	86.00	57.000	87.00	58.000
88.00	58.000	89.00	58.000	90.00	58.000
91.00	58.000	92.00	58.000	93.00	58.000
94.00	59.000	95.00	59.000	96.00	59.000
97.00	60.000	98.00	60.000	99.00	60.000

N = 922

Table 21

Percentile Ranks for FACES-III Modified Scoring, Ideal Adaptability

Percentile	Value	Percentile	Value	Percentile	Value
1.00	4.000	2.00	5.000	3.00	6.000
4.00	6.000	5.00	6.000	6.00	6.000
7.00	6.000	8.00	7.000	9.00	7.000
10.00	7.000	11.00	7.000	12.00	8.000
13.00	8.000	14.00	8.000	15.00	8.000
16.00	8.000	17.00	8.000	18.00	8.000
19.00	8.000	20.00	9.000	21.00	9.000
22.00	9.000	23.00	9.000	24.00	9.000
25.00	9.000	26.00	9.000	27.00	9.000
28.00	10.000	29.00	10.000	30.00	10.000
31.00	10.000	32.00	10.000	33.00	10.000
34.00	10.000	35.00	10.000	36.00	10.000
37.00	10.000	38.00	10.000	39.00	10.000
40.00	10.000	41.00	10.000	42.00	10.000
43.00	11.000	44.00	11.000	45.00	11.000
46.00	11.000	47.00	11.000	48.00	11.000
49.00	11.000	50.00	11.000	51.00	11.000
52.00	11.000	53.00	11.000	54.00	11.000
55.00	11.000	56.00	12.000	57.00	12.000
58.00	12.000	59.00	12.000	60.00	12.000
61.00	12.000	62.00	12.000	63.00	12.000
64.00	12.000	65.00	12.000	66.00	12.000
67.00	12.000	68.00	13.000	69.00	13.000
70.00	13.000	71.00	13.000	72.00	13.000
73.00	13.000	74.00	13.000	75.00	13.000
76.00	13.000	77.00	13.000	78.00	13.000
79.00	14.000	80.00	14.000	81.00	14.000
82.00	14.000	83.00	14.000	84.00	14.000
85.00	14.000	86.00	15.000	87.00	15.000
88.00	15.000	89.00	15.000	90.00	15.000
91.00	15.000	92.00	16.000	93.00	16.000
94.00	16.000	95.00	16.000	96.00	17.000
97.00	17.000	98.00	17.000	99.00	18.770

N = 922

Table 22

Percentile Ranks for FACES-III Modified Scoring, Ideal Democratic Family Style

Percentile	Value	Percentile	Value	Percentile	Value
1.00	4.000	2.00	4.000	3.00	4.000
4.00	5.000	5.00	5.000	6.00	6.000
7.00	6.000	8.00	6.000	9.00	6.000
10.00	7.000	11.00	7.000	12.00	7.000
13.00	7.000	14.00	7.000	15.00	8.000
16.00	8.000	17.00	8.000	18.00	8.000
19.00	8.000	20.00	8.000	21.00	9.000
22.00	9.000	23.00	9.000	24.00	9.000
25.00	9.000	26.00	9.000	27.00	9.000
28.00	9.000	29.00	9.000	30.00	10.000
31.00	10.000	32.00	10.000	33.00	10.000
34.00	10.000	35.00	10.000	36.00	10.000
37.00	10.000	38.00	10.000	39.00	10.000
40.00	11.000	41.00	11.000	42.00	11.000
43.00	11.000	44.00	11.000	45.00	11.000
46.00	11.000	47.00	11.000	48.00	11.000
49.00	11.000	50.00	11.000	51.00	11.000
52.00	11.000	53.00	11.130	54.00	12.000
55.00	12.000	56.00	12.000	57.00	12.000
58.00	12.000	59.00	12.000	60.00	12.000
61.00	12.000	62.00	12.000	63.00	12.000
64.00	12.000	65.00	12.000	66.00	13.000
67.00	13.000	68.00	13.000	69.00	13.000
70.00	13.000	71.00	13.000	72.00	13.000
73.00	13.000	74.00	13.000	75.00	13.000
76.00	14.000	77.00	14.000	78.00	14.000
79.00	14.000	80.00	14.000	81.00	14.000
82.00	14.000	83.00	15.000	84.00	15.000
85.00	15.000	86.00	15.000	87.00	15.000
88.00	15.000	89.00	15.000	90.00	15.000
91.00	16.000	92.00	16.000	93.00	16.000
94.00	16.000	95.00	16.000	96.00	16.080
97.00	17.000	98.00	17.540	99.00	18.000

N = 922

Table 23

Descriptive Statistics for Modified FACES-III Scales

Variable	Mean	Std. Dev.
Perceived Adaptability	13.91	3.89
Perceived Cohesion	39.29	6.30
Perceived Democratic Family Style	9.35	3.23
Ideal Adaptability	11.17	3.08
Ideal Cohesion	51.32	6.33
Ideal Democratic Family Style	11.16	3.30

Validity Information

Correlations between the unmodified FACES-III scales and the other unmodified four family measures (i.e., FSS, FRS, FILE, PSI) are presented in Table 24. Correlations were generally low, ranging in magnitude from .001 to .399. The Perceived Adaptability Scale and the two Ideal Scales correlated negligibly with the subscale and total scale scores from the remaining measures. The Perceived Cohesion scale scores had stronger relationships to scores from the other family measures. Specifically, perceived cohesion was related to total support ($r = .27$), support from informal kinship and the nuclear family ($r = .24$ and $r = .28$, respectively), relationship with spouse ($r = .32$), total stress ($r = .29$), and all types of resources ($r = .31$ to $.40$).

Correlations between the modified FACES-III scales and the other family measures (modified versions) are presented in Table 25. In general, the correlations between the modified measure were similar in magnitude and direction as the unmodified correlations.

Table 24

Intercorrelation Between FACES-III and Other Family Measures

	FACES-III Perceived Cohesion	FACES-III Perceived Adaptability	FACES-III Ideal Cohesion	FACES-III Ideal Adaptability
FSS Total	.2678	.2216	.1523	.0604
FSS General Professional Services	.1231	.1306	.0480	.0442
FSS Specialized Professional Services	.1554	.0873	.1424	.0547
FSS Informal Kinship	.2376	.2356	.1130	.0723
FSS Formal Kinship	.1367	.1073	.0346	-.0183
FSS Social Organizations	.1684	.1923	.1158	.0680
FSS Nuclear Family	.2845	.1419	.1817	.0184
PSI Child Adaptability	.1379	.0444	.0841	-.0171
PSI Child Acceptability	.1913	.0060	.0666	-.0188
PSI Child Demandingness	.0655	-.0114	-.0437	-.0551
PSI Child Mood	.1787	.0443	.0894	.0036
PSI Child Reinforces Parent	.2041	.0086	.1376	.0458
PSI Child Distractability/Hyperactivity	.1668	-.0357	.1334	.0368
PSI Parent Depression	.2445	-.0085	.0878	-.0391
PSI Parent Attachment	.1904	.0271	.2149	.0778
PSI Parent Restriction of Role	.1402	.0133	-.0262	-.0704
PSI Parent Sense of Competence	.1655	.0659	.0955	.0316
PSI Parent Social Isolation	.1809	.1097	.0452	.0165
PSI Parent Relationship with Spouse	.3222	.1448	.0825	-.0231
PSI Parent Health	.1215	.0424	-.0576	-.0689
PSI Total Stress	.2903	.0539	.1083	-.0177
FILE Total	-.1585	.1123	.0669	.1565
FILE Family Legal Violations	-.1295	-.0296	-.0435	.0144
FILE Transitions In and Out	-.0661	.0478	-.0004	.0623
FILE Losses	-.0507	.0398	-.0208	-.0010
FILE Illness & Family Care Strains	-.0331	.0501	.0695	.0925
FILE Work/Family Transitions	.0169	.0811	.0693	-.1778
FILE Financial & Business Strains	-.0984	.0867	.0819	.1467
FILE Intra/Family Strains	-.1768	.0927	.0439	.1534
FILE Marital Strains	-.1978	.0136	-.0691	.0263
FILE Pregnancy & Childbirth Strains	-.0709	.0371	-.0376	.0285
FRS External Support	.3470	.1044	.1305	-.0345
FRS Physical Resources	.3058	.0253	.1537	-.0347
FRS Time Availability	.3751	.0894	.0809	-.0918
FRS General Resources	.3650	.0734	.1693	-.0311
FRS Total Score	.3990	.0813	.1483	-.0548

Table 25
Intercorrelation Between *Modified* FACES-III and Other Modified Family Measures

	FACES-III Perceived Cohesion	FACES-III Perceived Adapta.	FACES-III Perceived Demo. Fam. Style	FACES-III Ideal Cohesion	FACES-III Ideal Adapta.	FACES-III Ideal Demo. Fam. Style
FRS Physical Resources	.2637	.0294	.0665	.1547	-.0020	.1035
FRS Basic Resources	.3555	.0097	.0804	.1560	-.0553	.0515
FRS Health/Medical	.2729	-.0057	.0737	.0604	-.0626	.0584
FRS Personal Time	.3151	.0252	.1130	.0182	-.1136	.0001
FRS Family Time	.3359	-.0061	.0824	.0552	-.0943	-.0330
FRS Extra Money	.3307	.0365	.1306	.0391	-.0939	.0071
FRS Total Resources	.3990	.0190	.1202	.1014	-.0952	.0351
FSS Family/Formal Kin	.1689	.1088	.0704	.0486	.0187	-.0313
FSS Friends	.2871	.1764	.1668	.1004	.0193	.0490
FSS Informal Support	.2267	.1436	.2110	.0995	.0250	.0793
FSS Social Groups	.1685	.1482	.1711	.1249	.0693	.1276
FSS Professional Support	.1430	.0533	.0985	.1069	.1040	.0723
FSS Total Support	.2678	.1668	.1893	.1284	.0375	.0749
PSI Child Adaptability	.1183	-.0110	.1059	.0756	-.0354	.0379
PSI Child Acceptability	.1662	-.0388	.0212	.0319	-.0501	-.0283
PSI Demandingness	.0944	-.0493	.0486	-.0451	-.0610	-.0289
PSI Child Mood	.1743	-.0085	.1050	.0881	-.0192	.0249
PSI Reinforces Parent	.2232	-.0115	.0534	.1280	.0079	.0464
PSI Distractibility/Hyperactivity	.1668	-.0703	.0217	.1083	-.0095	.0839
PSI Parent Depression	.2233	-.0866	.0785	.0727	-.0931	.0133
PSI Parent Restriction of Role	.1220	-.0338	.0874	-.0639	-.1054	.0113
PSI Parent Attachment	.2588	.0297	.0610	.2144	.0508	.1059
PSI Parent Sense of Competence	.0383	-.0092	.0316	.0077	-.0539	.0108
PSI Parent Social Isolation	.2341	.0283	.1733	.0399	-.0367	.0722
PSI Parent Relationship with Spouse	.3222	.0441	.2017	.0501	-.0674	.0586
PSI Health	.0892	-.0662	.0498	-.0547	-.0867	-.0212
PSI Total Stress	.2903	-.0333	.1350	.0822	-.0712	.0521
FILE Total	-.1585	.1260	.0460	.0812	.1322	.1132
FILE Family Legal Violations	-.1295	.0434	.0000	-.0293	.0208	-.0076
FILE Transitions In and Out	-.0661	.0372	.0394	.0058	.0364	.0673
FILE Losses	-.0507	.0205	.0454	-.0150	-.0029	-.0040
FILE Illness & Family Care Strains	-.0331	.0626	.0129	.0662	.0891	.0703
FILE Work/Family Transitions	.0169	.0802	.0461	.1115	.0339	.0613
FILE Financial & Business Strains	-.0984	.1012	.0308	.1030	.1464	.0648
FILE Intra-Family Strains	-.1768	.0966	.0469	.0559	.1090	.1407
FILE Marital Status	-.1978	.0362	-.0196	-.0531	.0365	.0037
FILE Pregnancy & Childbirth Strains	-.0709	.0845	-.0363	-.0372	.0881	-.0199

Family Support Scale (FSS)

Descriptive data for the FSS at Year 1 and the variance-covariance matrices on which structural analyses were based are presented in Technical Appendix B. These matrices may be employed for further analyses by interested readers or to replicate the present results.

Internal Consistency and Test-Retest Reliability

Scoring for the FSS came from two sources. First, the scoring recommended by Dunst, Jenkins, and Trivette (1984) which identifies six subscales derived via exploratory factor analysis. The subscales were labeled Informal Kinship, Social Organizations, Formal Kinship, Nuclear Family, Specialized Professional Services, and Generic Professional Services. The second source of a model was scoring instructions for the instrument by Dunst and Trivette (1986) which identified five sources of support, or subscales: Formal Kinship, Informal Kinship, Social Groups, Professionals, and Professional Groups. Since it was unclear if one scoring key should take precedence over the other, parallel analyses were conducted using both systems. Generally, estimates of internal consistency and test-retest reliability for the FSS subscales were consistent with those presented previously in the literature. Results are summarized in Tables 26 and 27.

Table 26
Internal Consistency Reliability of FSS Data

FSS Scale	Internal Consistency Coefficient
FSS Scales: Six Factor Scoring	
Informal Kinship	.71
Social Organizations	.73
Formal Kinship	.61
Nuclear Family	.56
Spec. Professional Services	.66
Generic Professional Services	.44
FSS Scale: Five Factor Scoring	
Formal Kinship	.67
Informal Kinship	.76
Social Groups	.71
Professionals	.53
Professional Groups	.56
FSS Total	.85

Table 27
Test-Retest Reliability Coefficients for FSS Data

FSS Scales	Year1-Year2	Year1-Year3	Year2-Year3
FSS Six Factor Scoring			
Informal Kinship	.50	.49	.53
Social Organizations	.35	.40	.43
Formal Kinship	.54	.53	.59
Nuclear Family	.57	.48	.54
Spec. Professional Services	.38	.33	.40
Generic Professional Services	.36	.29	.42
FSS Five Factor Scoring			
Formal Kinship	.57	.52	.62
Informal Kinship	.47	.47	.48
Social Groups	.42	.42	.47
Professionals	.41	.32	.45
Professional Groups	.32	.29	.36
FSS Total	.51	.49	.57

Confirming Structure

Confirmation of the two proposed factor structures of the FSS began with the estimation of a null model. The null model assumes complete independence of all observed measurements. Essentially, this means that each item of the instrument is considered to be its own factor. The null model fit statistics are a baseline from which to further judge future models. Fit statistics for the null model for the FSS were as follows:

- ◉ $\chi^2 = 4910.55$ ($p < .001$)
- ◉ $\chi^2/df = 32.1$ ($df = 153$)
- ◉ GFI = .446
- ◉ AGFI = .381
- ◉ RMR = .349

Fit statistics for the six factor model were:

- ◉ $\chi^2 = 962.40$ ($p < .001$)
- ◉ $\chi^2/df = 8.0$ ($df = 120$)
- ◉ GFI = .893

- AGFI = .848
- RMR = .099

Fit statistics for the five factor model were:

- $\chi^2 = 1020.42$ ($p < .001$)
- $\chi^2/df = 8.2$ ($df = 125$)
- GFI = .885
- AGFI = .843
- RMR = .106

Although both the five and six factor solution for the FSS resulted in a nearly acceptable fit between the data and the model, it was hoped that some improvement in the model could still be made. Thus, analyses continued with exploratory procedures.

Improving Structure

A series of models were tested with the small subset of data used for the exploratory analyses ($n = 345$). The "best" model identified was a 5 factor model that was different from the one proposed by Dunst and Trivette (1986). The five factor model, presented in Figure 3, had the following fit statistics:

- $\chi^2 = 313.68$ ($p < .001$)
- $\chi^2/df = 2.6$ ($df = 123$)
- GFI = .911
- AGFI = .877
- RMR = .095

Correlations between the factors are presented in Table 28. The improved model showed a noteworthy, and statistically significant, improvement on all fit indexes and suggests that the five factor model provided an adequate fit to the data.

Table 28
Intercorrelations Between FSS Factors (Phi Matrix)

	1	2	3	4	5
1. Family	1.00				
2. Friends	.538	1.000			
3. Informal Support	.441	.799	1.000		
4. Social Groups	.408	.511	.814	1.00	
5. Professional Support	.346	.555	.752	.587	1.000

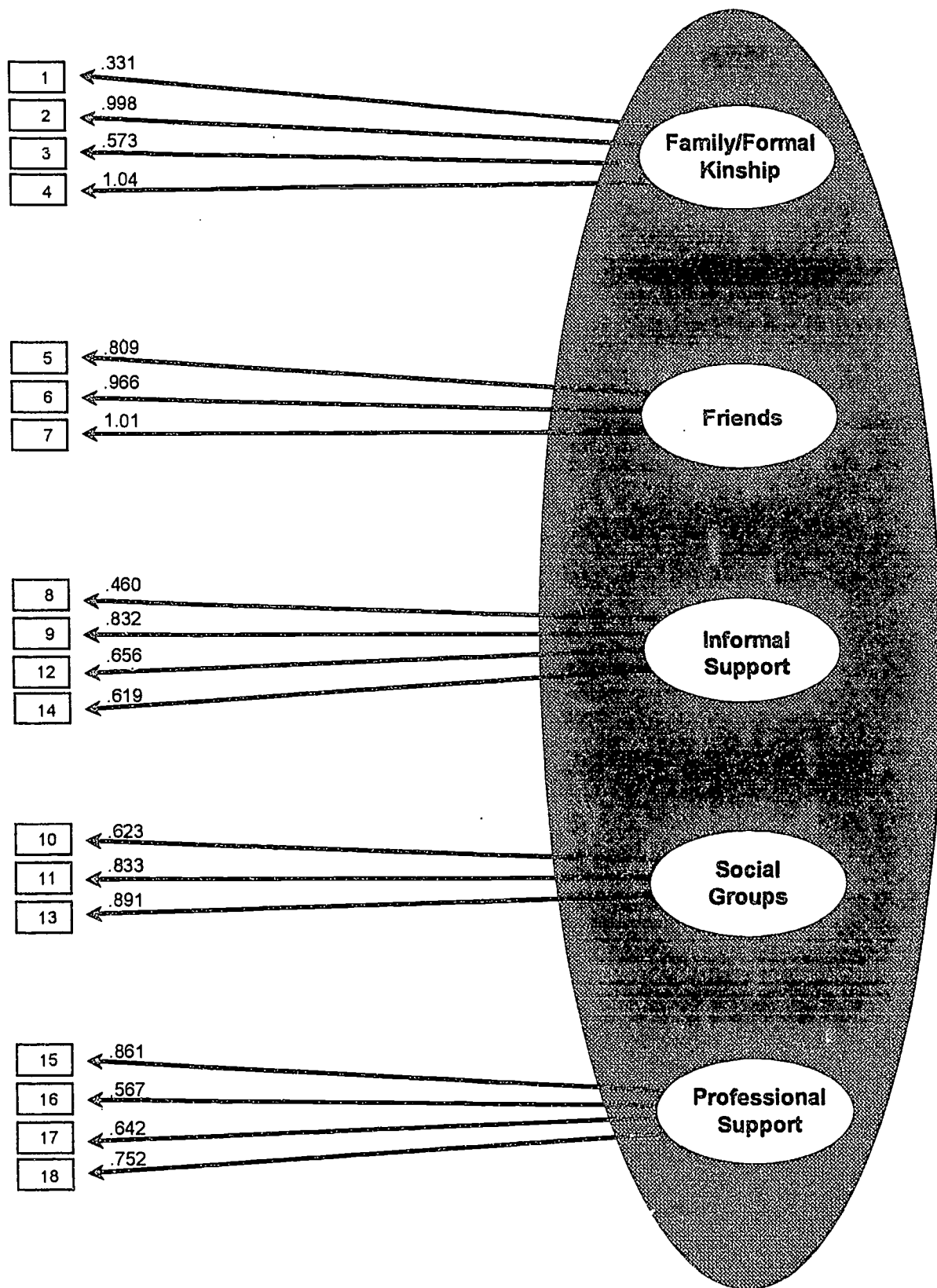


Figure 3. Structural Model for the FSS

Note: Dark circle indicates all factors are correlated. The Phi Matrix is presented in Table 28.

The five factor model identified in these analyses was interpretively similar to that proposed by Dunst and Trivette (1986). The item content and labels for the factors are summarized in Table 29. The loadings of two items are of particular note. First, spousal support did not load well with other familial support (e.g., parents). Interpretively, it is consistent that spousal support was grouped with friends. In each case, support is a close relationship that is actively chosen by the individual. Conversely, relationships with parents and relatives are not active choices, but the result of birth or marriage. Second, children are considered a source of informal support. Although children are certainly formal kin, a child is often not a source of direct support for a parent. For instance, parents would not usually go to their children to discuss difficulties in raising a child or marital concerns.

Table 29
FSS Five Factor Solution

FSS Factor (Subscale)	Item Number and Content
Family/Formal Kinship	1. My parents 2. Spouse's parents 3. My relatives 4. Spouse's relatives
Friends	5. Spouse 6. My Friends 7. Spouse's friends
Informal Support	8. Own children 9. Other parents 12. Co-workers 14. Family physician
Social Groups	10. Church 11. Social groups/clubs 13. Parent groups
Professional Support	15. Professional helpers 16. School/day care 17. Professional agencies 18. Early intervention services

Confirming New Structure and Measuring Invariance

Confirming structure. The five factor model for the FSS was replicated with an independent sample, the remainder of the Year 1 data ($n = 577$). The parameter estimates generated with the $n = 345$ sample were fit to the new sample (e.g., all λ 's were constrained).

The five factor model for with the path values constrained resulted in the following fit statistics:

- $\chi^2 = 542.20$ ($p < .001$)
- $\chi^2/df = 3.8$ ($df = 141$)
- GFI = .908
- AGFI = .888
- RMR = .143

As would be expected, there was some decrease in fit statistics and an increase in the χ^2 value.

However, the fit statistics and χ^2 value suggests that the model provided an acceptable fit to the data.

Invariance analyses for the FSS. The five factor model for the FSS was also tested for invariance across time. A subset of the sample for which only Year 1 and Year 2 data were available ($n = 208$) was used to assess the stability of the model of a one year time period. The analyses were conducted by simultaneously testing for invariance across groups, specifically focusing on the factor loadings. The model was constrained such that the λ matrix (factor loadings) was invariant over groups. The subjects used to test invariance included no subjects used to generate the models being tested, as indicated in Table 2 (p. 6).

Fit statistics for the analyses across one year were:

- $\chi^2 = 535.70$ ($p < .001$)
- $\chi^2/df = 2.0$ ($df = 264$)
- GFI = .887
- RMR = .104

A similar analyses was conducted across two years using a subset of the sample for which all three data points were available ($n = 369$). Again the λ matrix was constrained to be invariant across all three time periods. The Fit statistics were:

- $\chi^2 = 1068.90$ ($p < .001$)
- $\chi^2/df = 2.6$ ($df = 405$)
- GFI = .901
- RMR = .083

Results of the confirmatory and invariance analyses suggest that the five factor model identified for the FSS appears to be psychometrically sound. Although the fit statistics decreased with invariance analyses, the model still performed reasonably well even over a two year time period. Internal consistency and test-retest reliability of scores derived from the modified scoring of the FSS are presented in Tables 30 and 31.

Table 30

Internal Consistency Reliability of Modified FSS Data

FSS Scale	Internal Consistency Coefficient
Family/Formal Kinship	.69
Friends	.67
Informal Support	.59
Social Groups	.71
Professional Support	.69

Table 31

Test-Retest Reliability Coefficients for Modified FSS Data

FSS Scale	Year 1 - Year 2	Year 1 - Year 3	Year 2 - Year 3
Family/Formal Kinship	.56	.53	.59
Friends	.52	.49	.53
Informal Support	.45	.40	.51
Social Groups	.42	.42	.47
Professional Support	.34	.30	.41

Normative Data

Percentile ranks for the original FSS scales using the six factor scoring are presented in Tables 32 -38. Percentiles were calculated on the full sample of 922 subjects. Because these data are unique in their breadth and diversity, the normative data presented should be used when interpreting scores from a family having children with disabilities. Descriptive statistics for the FSS total score and subscales are presented in Table 39.

Table 32
Percentile Ranks for FSS Total Score

Percentile	Value	Percentile	Value	Percentile	Value
1.00	9.900	2.00	12.331	3.00	13.810
4.00	14.986	5.00	15.030	6.00	16.000
7.00	17.000	8.00	17.820	9.00	18.305
10.00	19.000	11.00	20.143	12.00	21.000
13.00	21.548	14.00	22.134	15.00	22.940
16.00	23.000	17.00	23.685	18.00	24.000
19.00	24.918	20.00	25.344	21.00	26.000
22.00	26.026	23.00	26.720	24.00	27.000
25.00	27.377	26.00	27.980	27.00	28.158
28.00	28.499	29.00	29.000	30.00	29.000
31.00	29.499	32.00	30.000	33.00	30.056
34.00	30.466	35.00	30.882	36.00	31.000
37.00	31.320	38.00	31.700	39.00	32.000
40.00	32.170	41.00	32.389	42.00	32.680
43.00	33.000	44.00	33.132	45.00	33.351
46.00	33.896	47.00	34.000	48.00	34.210
49.00	34.403	50.00	34.820	51.00	34.930
52.00	35.108	53.00	35.484	54.00	35.843
55.00	36.000	56.00	36.275	57.00	36.560
58.00	37.000	59.00	37.269	60.00	37.604
61.00	37.912	62.00	38.000	63.00	38.225
64.00	38.506	65.00	38.689	66.00	39.000
67.00	39.474	68.00	39.720	69.00	40.000
70.00	40.297	71.00	40.833	72.00	41.141
73.00	41.404	74.00	41.820	75.00	42.120
76.00	42.594	77.00	43.000	78.00	43.569
79.00	43.967	80.00	44.018	81.00	44.330
82.00	44.737	83.00	45.000	84.00	45.875
85.00	46.104	86.00	46.306	87.00	46.791
88.00	47.250	89.00	47.720	90.00	48.370
91.00	49.205	92.00	50.462	93.00	51.010
94.00	52.000	95.00	53.026	96.00	54.787
97.00	57.723	98.00	59.417	99.00	62.270

N = 922

Table 33

Percentile Ranks for FSS Generic Professional Services Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	.000	2.00	.000	3.00	.000
4.00	.000	5.00	1.000	6.00	1.000
7.00	1.000	8.00	1.000	9.00	1.720
10.00	1.720	11.00	2.000	12.00	2.000
13.00	2.000	14.00	2.000	15.00	2.000
16.00	2.000	17.00	2.000	18.00	2.000
19.00	2.000	20.00	2.720	21.00	2.720
22.00	2.720	23.00	2.720	24.00	2.720
25.00	3.000	26.00	3.000	27.00	3.000
28.00	3.000	29.00	3.000	30.00	3.000
31.00	3.000	32.00	3.000	33.00	3.000
34.00	3.720	35.00	3.720	36.00	3.720
37.00	3.720	38.00	3.720	39.00	3.720
40.00	3.720	41.00	3.720	42.00	3.720
43.00	4.000	44.00	4.000	45.00	4.000
46.00	4.000	47.00	4.000	48.00	4.000
49.00	4.000	50.00	4.000	51.00	4.000
52.00	4.000	53.00	4.000	54.00	4.000
55.00	4.070	56.00	4.070	57.00	4.391
58.00	4.720	59.00	4.720	60.00	4.720
61.00	4.720	62.00	4.720	63.00	4.720
64.00	4.720	65.00	4.720	66.00	5.000
67.00	5.000	68.00	5.000	69.00	5.000
70.00	5.000	71.00	5.000	72.00	5.000
73.00	5.000	74.00	5.000	75.00	5.000
76.00	5.000	77.00	5.720	78.00	5.720
79.00	5.720	80.00	5.720	81.00	5.720
82.00	6.000	83.00	6.000	84.00	6.000
85.00	6.000	86.00	6.000	87.00	6.000
88.00	6.000	89.00	6.000	90.00	6.000
91.00	7.000	92.00	7.000	93.00	7.000
94.00	7.000	95.00	8.000	96.00	8.000
97.00	8.000	98.00	8.000	99.00	8.000

N = 922

Table 34

Percentile Ranks for FSS Specialized Professional Services Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	.000	2.00	.000	3.00	.000
4.00	1.000	5.00	2.000	6.00	2.000
7.00	2.949	8.00	3.000	9.00	3.000
10.00	4.000	11.00	4.000	12.00	4.000
13.00	4.000	14.00	4.609	15.00	5.000
16.00	5.000	17.00	5.000	18.00	5.270
19.00	5.839	20.00	6.000	21.00	6.000
22.00	6.000	23.00	6.000	24.00	6.000
25.00	6.000	26.00	6.270	27.00	6.270
28.00	6.550	29.00	6.550	30.00	6.820
31.00	7.000	32.00	7.000	33.00	7.000
34.00	7.000	35.00	7.007	36.00	7.270
37.00	7.270	38.00	7.550	39.00	7.690
40.00	7.690	41.00	7.690	42.00	7.820
43.00	7.820	44.00	8.000	45.00	8.000
46.00	8.000	47.00	8.000	48.00	8.000
49.00	8.000	50.00	8.000	51.00	8.000
52.00	8.265	53.00	8.270	54.00	8.270
55.00	8.270	56.00	8.420	57.00	8.434
58.00	8.550	59.00	8.550	60.00	8.550
61.00	8.820	62.00	8.820	63.00	8.820
64.00	9.000	65.00	9.000	66.00	9.000
67.00	9.000	68.00	9.000	69.00	9.000
70.00	9.153	71.00	9.270	72.00	9.270
73.00	9.420	74.00	9.550	75.00	10.000
76.00	10.000	77.00	10.000	78.00	10.000
79.00	10.270	80.00	10.270	81.00	10.270
82.00	10.270	83.00	10.270	84.00	10.270
85.00	10.270	86.00	10.550	87.00	10.550
88.00	10.870	89.00	11.000	90.00	11.000
91.00	11.000	92.00	12.000	93.00	12.000
94.00	12.000	95.00	12.000	96.00	12.000
97.00	12.000	98.00	12.000	99.00	12.000

N = 922

Table 35
Percentile Ranks for FSS Informal Kinship Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	.000	2.00	1.000	3.00	1.000
4.00	2.000	5.00	2.000	6.00	3.000
7.00	3.000	8.00	3.000	9.00	3.490
10.00	4.000	11.00	4.000	12.00	4.000
13.00	4.000	14.00	4.002	15.00	4.526
16.00	5.000	17.00	5.000	18.00	5.000
19.00	5.000	20.00	5.000	21.00	5.466
22.00	5.570	23.00	6.000	24.00	6.000
25.00	6.000	26.00	6.000	27.00	6.000
28.00	6.026	29.00	6.330	30.00	6.490
31.00	6.780	32.00	6.936	33.00	7.000
34.00	7.000	35.00	7.000	36.00	7.000
37.00	7.070	38.00	7.290	39.00	7.350
40.00	7.490	41.00	7.530	42.00	7.806
43.00	8.000	44.00	8.000	45.00	8.000
46.00	8.000	47.00	8.000	48.00	8.292
49.00	8.424	50.00	8.570	51.00	8.849
52.00	9.000	53.00	9.000	54.00	9.000
55.00	9.000	56.00	9.000	57.00	9.000
58.00	9.224	59.00	9.330	60.00	9.490
61.00	9.570	62.00	9.780	63.00	9.929
64.00	10.000	65.00	10.000	66.00	10.000
67.00	10.025	68.00	10.290	69.00	10.330
70.00	10.490	71.00	10.570	72.00	10.900
73.00	11.000	74.00	11.000	75.00	11.290
76.00	11.350	77.00	11.734	78.00	12.000
79.00	12.000	80.00	12.000	81.00	12.000
82.00	12.290	83.00	12.330	84.00	12.637
85.00	13.000	86.00	13.000	87.00	13.001
88.00	13.290	89.00	14.000	90.00	14.000
91.00	14.290	92.00	14.882	93.00	15.000
94.00	15.203	95.00	15.979	96.00	16.000
97.00	16.703	98.00	17.312	99.00	18.837

N = 922

Table 36

Percentile Ranks for FSS Formal Kinship Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	.000	2.00	.000	3.00	1.000
4.00	1.000	5.00	1.000	6.00	2.000
7.00	2.000	8.00	2.000	9.00	2.000
10.00	2.986	11.00	3.000	12.00	3.000
13.00	3.000	14.00	3.000	15.00	3.000
16.00	3.000	17.00	3.446	18.00	3.510
19.00	4.000	20.00	4.000	21.00	4.000
22.00	4.000	23.00	4.000	24.00	4.000
25.00	4.000	26.00	4.000	27.00	4.000
28.00	4.490	29.00	4.557	30.00	4.942
31.00	5.000	32.00	5.000	33.00	5.000
34.00	5.000	35.00	5.000	36.00	5.000
37.00	5.000	38.00	5.000	39.00	5.000
40.00	5.490	41.00	5.510	42.00	5.593
43.00	6.000	44.00	6.000	45.00	6.000
46.00	6.000	47.00	6.000	48.00	6.000
49.00	6.000	50.00	6.000	51.00	6.000
52.00	6.000	53.00	6.000	54.00	6.000
55.00	6.090	56.00	6.090	57.00	6.152
58.00	6.510	59.00	6.580	60.00	7.000
61.00	7.000	62.00	7.000	63.00	7.000
64.00	7.000	65.00	7.000	66.00	7.000
67.00	7.000	68.00	7.000	69.00	7.000
70.00	7.490	71.00	7.587	72.00	8.000
73.00	8.000	74.00	8.000	75.00	8.000
76.00	8.000	77.00	8.000	78.00	8.000
79.00	8.178	80.00	8.510	81.00	9.000
82.00	9.000	83.00	9.000	84.00	9.000
85.00	9.000	86.00	9.000	87.00	9.000
88.00	9.000	89.00	9.510	90.00	10.000
91.00	10.000	92.00	10.000	93.00	10.000
94.00	10.000	95.00	11.000	96.00	12.000
97.00	12.000	98.00	12.000	99.00	12.000

N = 922

Table 37

Percentile Ranks for FSS Social Organization Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	.000	2.00	.000	3.00	.000
4.00	.000	5.00	.000	6.00	.000
7.00	.000	8.00	.000	9.00	.000
10.00	.000	11.00	.000	12.00	.000
13.00	.000	14.00	.000	15.00	.000
16.00	.000	17.00	1.000	18.00	1.000
19.00	1.000	20.00	1.000	21.00	1.000
22.00	1.020	23.00	1.240	24.00	2.000
25.00	2.000	26.00	2.000	27.00	2.000
28.00	2.000	29.00	2.000	30.00	2.155
31.00	2.243	32.00	2.260	33.00	2.410
34.00	3.000	35.00	3.000	36.00	3.000
37.00	3.000	38.00	3.020	39.00	3.170
40.00	3.190	41.00	3.240	42.00	3.260
43.00	3.260	44.00	3.260	45.00	3.260
46.00	3.410	47.00	3.426	48.00	3.430
49.00	3.430	50.00	3.430	51.00	3.430
52.00	3.430	53.00	3.430	54.00	3.430
55.00	3.430	56.00	3.430	57.00	3.430
58.00	3.430	59.00	3.430	60.00	3.430
61.00	3.430	62.00	3.430	63.00	3.430
64.00	3.430	65.00	4.000	66.00	4.000
67.00	4.000	68.00	4.000	69.00	4.170
70.00	4.190	71.00	4.240	72.00	4.260
73.00	4.260	74.00	4.260	75.00	4.410
76.00	5.000	77.00	5.000	78.00	5.020
79.00	5.190	80.00	5.210	81.00	5.260
82.00	5.260	83.00	5.410	84.00	6.000
85.00	6.000	86.00	6.000	87.00	6.020
88.00	6.170	89.00	6.240	90.00	6.410
91.00	7.000	92.00	7.020	93.00	7.240
94.00	8.000	95.00	8.017	96.00	9.000
97.00	9.000	98.00	10.000	99.00	12.000

N = 922

Table 38

Percentile Ranks for FSS Nuclear Family Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	.000	2.00	.000	3.00	.000
4.00	.000	5.00	.000	6.00	.000
7.00	1.000	8.00	1.000	9.00	1.000
10.00	1.000	11.00	2.000	12.00	2.000
13.00	2.000	14.00	2.000	15.00	2.000
16.00	2.000	17.00	2.860	18.00	2.880
19.00	3.000	20.00	3.000	21.00	3.000
22.00	3.000	23.00	3.000	24.00	3.000
25.00	3.000	26.00	3.860	27.00	3.860
28.00	4.000	29.00	4.000	30.00	4.000
31.00	4.000	32.00	4.000	33.00	4.000
34.00	4.000	35.00	4.000	36.00	4.000
37.00	4.000	38.00	4.000	39.00	4.000
40.00	4.000	41.00	4.000	42.00	4.000
43.00	4.710	44.00	4.710	45.00	4.854
46.00	4.860	47.00	5.000	48.00	5.000
49.00	5.000	50.00	5.000	51.00	5.000
52.00	5.000	53.00	5.000	54.00	5.000
55.00	5.000	56.00	5.000	57.00	5.000
58.00	5.000	59.00	5.000	60.00	5.860
61.00	5.860	62.00	5.860	63.00	5.860
64.00	6.000	65.00	6.000	66.00	6.000
67.00	6.000	68.00	6.000	69.00	6.000
70.00	6.000	71.00	6.000	72.00	6.000
73.00	6.000	74.00	6.000	75.00	6.000
76.00	6.000	77.00	7.000	78.00	7.000
79.00	7.000	80.00	7.000	81.00	7.000
82.00	7.000	83.00	7.000	84.00	7.000
85.00	7.000	86.00	7.000	87.00	7.000
88.00	7.000	89.00	8.000	90.00	8.000
91.00	8.000	92.00	8.000	93.00	8.000
94.00	8.000	95.00	8.000	96.00	8.000
97.00	8.000	98.00	8.000	99.00	8.000

N = 922

Table 39

Descriptive Statistics for FSS Total Score and Subscale Scores

Variable	Mean	Std Dev
Total FSS	34.71	11.36
Generic Professional Services	4.08	1.90
Spec. Professional Services	7.71	2.86
Informal Kinship	8.68	3.96
Formal Kinship	6.08	2.74
Social Groups	3.43	2.48
Nuclear Family	4.73	2.21

Percentile ranks for the modified five factor scoring for the FSS are presented in Tables 40 - 44. These percentile ranks reflect the five factor scoring. These data should be used interpretively for the modified scoring and is recommended for use with families having children with disabilities. Descriptive statistics for the Modified FSS Scales are presented in Table 45.

Table 40

Percentile Ranks for MODIFIED FSS Family/Formal Kinship Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	.000	2.00	1.000	3.00	1.690
4.00	2.000	5.00	2.000	6.00	2.643
7.00	3.000	8.00	3.000	9.00	3.000
10.00	3.600	11.00	4.000	12.00	4.000
13.00	4.000	14.00	4.000	15.00	4.000
16.00	4.000	17.00	4.580	18.00	5.000
19.00	5.000	20.00	5.000	21.00	5.000
22.00	5.000	23.00	5.000	24.00	5.370
25.00	5.573	26.00	5.980	27.00	6.000
28.00	6.000	29.00	6.000	30.00	6.000
31.00	6.000	32.00	6.000	33.00	6.000
34.00	6.000	35.00	6.000	36.00	6.468
37.00	6.580	38.00	7.000	39.00	7.000
40.00	7.000	41.00	7.000	42.00	7.000
43.00	7.000	44.00	7.000	45.00	7.350
46.00	7.490	47.00	7.811	48.00	7.950
49.00	7.950	50.00	8.000	51.00	8.000
52.00	8.000	53.00	8.000	54.00	8.000
55.00	8.000	56.00	8.000	57.00	8.000
58.00	8.000	59.00	8.000	60.00	8.370
61.00	8.512	62.00	8.889	63.00	9.000
64.00	9.000	65.00	9.000	66.00	9.000
67.00	9.000	68.00	9.350	69.00	9.588
70.00	10.000	71.00	10.000	72.00	10.000
73.00	10.000	74.00	10.000	75.00	10.000
76.00	10.000	77.00	10.370	78.00	10.595
79.00	11.000	80.00	11.000	81.00	11.000
82.00	11.370	83.00	12.000	84.00	12.000
85.00	12.000	86.00	12.000	87.00	12.000
88.00	12.000	89.00	13.000	90.00	13.000
91.00	13.000	92.00	13.600	93.00	14.000
94.00	14.000	95.00	14.000	96.00	16.000
97.00	16.000	98.00	16.000	99.00	16.000

N = 922

Table 41

Percentile Ranks for MODIFIED FSS Friends Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	1.000	2.00	1.000	3.00	1.000
4.00	1.000	5.00	1.000	6.00	2.000
7.00	2.000	8.00	2.000	9.00	2.000
10.00	2.000	11.00	2.930	12.00	3.000
13.00	3.000	14.00	3.000	15.00	3.000
16.00	3.000	17.00	3.000	18.00	3.000
19.00	3.122	20.00	4.000	21.00	4.000
22.00	4.000	23.00	4.000	24.00	4.000
25.00	4.000	26.00	4.000	27.00	4.000
28.00	4.000	29.00	4.330	30.00	4.850
31.00	5.000	32.00	5.000	33.00	5.000
34.00	5.000	35.00	5.000	36.00	5.000
37.00	5.000	38.00	5.000	39.00	5.010
40.00	5.330	41.00	6.000	42.00	6.000
43.00	6.000	44.00	6.000	45.00	6.000
46.00	6.000	47.00	6.000	48.00	6.000
49.00	6.000	50.00	6.000	51.00	6.000
52.00	6.000	53.00	6.180	54.00	6.330
55.00	6.330	56.00	7.000	57.00	7.000
58.00	7.000	59.00	7.000	60.00	7.000
61.00	7.000	62.00	7.000	63.00	7.000
64.00	7.000	65.00	7.330	66.00	7.330
67.00	7.340	68.00	8.000	69.00	8.000
70.00	8.000	71.00	8.000	72.00	8.000
73.00	8.000	74.00	8.000	75.00	8.000
76.00	8.000	77.00	8.000	78.00	8.010
79.00	8.330	80.00	8.538	81.00	9.000
82.00	9.000	83.00	9.000	84.00	9.000
85.00	9.000	86.00	9.257	87.00	10.000
88.00	10.000	89.00	10.000	90.00	10.000
91.00	10.000	92.00	10.000	93.00	10.000
94.00	11.000	95.00	12.000	96.00	12.000
97.00	12.000	98.00	12.000	99.00	12.000

N = 922

Table 42

Percentile Ranks for MODIFIED FSS Informal Support Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	.230	2.00	1.000	3.00	2.000
4.00	2.000	5.00	2.000	6.00	2.684
7.00	3.000	8.00	3.000	9.00	3.000
10.00	3.000	11.00	3.760	12.00	4.000
13.00	4.000	14.00	4.000	15.00	4.000
16.00	4.116	17.00	4.279	18.00	4.514
19.00	4.950	20.00	5.000	21.00	5.000
22.00	5.000	23.00	5.000	24.00	5.000
25.00	5.170	26.00	5.170	27.00	5.460
28.00	5.660	29.00	5.914	30.00	6.000
31.00	6.000	32.00	6.000	33.00	6.000
34.00	6.000	35.00	6.170	36.00	6.170
37.00	6.290	38.00	6.460	39.00	6.519
40.00	6.660	41.00	6.950	42.00	7.000
43.00	7.000	44.00	7.000	45.00	7.000
46.00	7.000	47.00	7.000	48.00	7.170
49.00	7.170	50.00	7.290	51.00	7.300
52.00	7.460	53.00	7.490	54.00	7.579
55.00	7.660	56.00	7.766	57.00	7.950
58.00	8.000	59.00	8.000	60.00	8.000
61.00	8.000	62.00	8.000	63.00	8.170
64.00	8.170	65.00	8.290	66.00	8.460
67.00	8.490	68.00	8.597	69.00	8.660
70.00	8.950	71.00	9.000	72.00	9.000
73.00	9.000	74.00	9.000	75.00	9.000
76.00	9.170	77.00	9.170	78.00	9.290
79.00	9.465	80.00	9.660	81.00	10.000
82.00	10.000	83.00	10.000	84.00	10.170
85.00	10.290	86.00	10.629	87.00	11.000
88.00	11.000	89.00	11.000	90.00	11.000
91.00	11.282	92.00	11.460	93.00	12.000
94.00	12.000	95.00	12.290	96.00	13.000
97.00	13.207	98.00	14.000	99.00	15.000

N = 922

Table 43

Percentile Ranks for MODIFIED FSS Social Groups Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	.000	2.00	.000	3.00	.000
4.00	.000	5.00	.000	6.00	.000
7.00	.000	8.00	.000	9.00	.000
10.00	.000	11.00	.000	12.00	.000
13.00	.000	14.00	.000	15.00	1.000
16.00	1.000	17.00	1.000	18.00	1.000
19.00	1.000	20.00	1.000	21.00	1.240
22.00	1.240	23.00	2.000	24.00	2.000
25.00	2.000	26.00	2.000	27.00	2.000
28.00	2.020	29.00	2.260	30.00	3.000
31.00	3.000	32.00	3.000	33.00	3.000
34.00	3.020	35.00	3.240	36.00	3.240
37.00	3.260	38.00	3.260	39.00	3.260
40.00	3.260	41.00	3.590	42.00	3.830
43.00	3.830	44.00	3.830	45.00	3.830
46.00	3.830	47.00	3.830	48.00	3.830
49.00	3.830	50.00	3.830	51.00	3.830
52.00	3.830	53.00	4.000	54.00	4.000
55.00	4.000	56.00	4.000	57.00	4.020
58.00	4.020	59.00	4.240	60.00	4.256
61.00	4.260	62.00	4.260	63.00	4.260
64.00	4.260	65.00	4.260	66.00	4.260
67.00	4.590	68.00	4.810	69.00	5.000
70.00	5.000	71.00	5.000	72.00	5.020
73.00	5.240	74.00	5.240	75.00	5.260
76.00	5.260	77.00	5.260	78.00	5.260
79.00	5.573	80.00	6.000	81.00	6.000
82.00	6.000	83.00	6.000	84.00	6.020
85.00	6.240	86.00	6.260	87.00	6.570
88.00	7.000	89.00	7.000	90.00	7.020
91.00	7.020	92.00	7.240	93.00	8.000
94.00	8.000	95.00	8.207	96.00	9.000
97.00	9.703	98.00	10.540	99.00	12.000

N = 922

Table 44

Percentile Ranks for MODIFIED FSS Professional Support Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	.000	2.00	.000	3.00	1.000
4.00	2.000	5.00	2.040	6.00	3.000
7.00	3.000	8.00	4.000	9.00	4.000
10.00	4.270	11.00	5.000	12.00	5.000
13.00	5.718	14.00	6.000	15.00	6.000
16.00	6.000	17.00	6.000	18.00	6.270
19.00	6.565	20.00	7.000	21.00	7.000
22.00	7.000	23.00	7.270	24.00	7.642
25.00	7.850	26.00	8.000	27.00	8.000
28.00	8.000	29.00	8.000	30.00	8.000
31.00	8.157	32.00	8.270	33.00	8.270
34.00	8.550	35.00	8.720	36.00	8.831
37.00	9.000	38.00	9.000	39.00	9.000
40.00	9.140	41.00	9.270	42.00	9.410
43.00	9.410	44.00	9.540	45.00	9.540
46.00	9.631	47.00	9.720	48.00	9.822
49.00	9.990	50.00	10.000	51.00	10.000
52.00	10.000	53.00	10.000	54.00	10.000
55.00	10.140	56.00	10.270	57.00	10.270
58.00	10.270	59.00	10.356	60.00	10.540
61.00	10.550	62.00	10.720	63.00	10.820
64.00	10.990	65.00	11.000	66.00	11.000
67.00	11.000	68.00	11.140	69.00	11.270
70.00	11.270	71.00	11.270	72.00	11.550
73.00	11.720	74.00	11.990	75.00	11.990
76.00	11.990	77.00	12.000	78.00	12.000
79.00	12.000	80.00	12.000	81.00	12.000
82.00	12.270	83.00	12.550	84.00	12.720
85.00	12.820	86.00	13.000	87.00	13.000
88.00	13.591	89.00	13.720	90.00	13.720
91.00	14.000	92.00	14.000	93.00	14.270
94.00	14.270	95.00	14.550	96.00	15.000
97.00	15.000	98.00	16.000	99.00	16.000

N = 922

Table 45

Descriptive Statistics for Modified FSS Scales

Variable	Mean	Std Dev
Family/Formal Kinship	7.95	3.58
Friends	6.20	2.84
Informal Support	7.30	3.00
Social Groups	3.83	2.60
Professional Support	9.43	3.51

Validity Information

Correlations between the unmodified FSS (six subscale scoring) and the other unmodified family measures are presented in Table 46. The correlations were generally low, ranging in magnitude from .001 to .375. The FSS Total Score had the strongest relationships with the Family Resource Scale scores ($r = .23$ to $.35$), the FACES-III Perceived Scales ($r = .27$ and $.22$), and the PSI Social Isolation Scale ($r = .23$) and Relationship with Spouse Scale ($r = .29$). As would be expected, the FSS General and Specialized Professional Services had minimal relationships with the other family measures. The FSS Informal Kinship, Formal Kinship, and Nuclear Family Scales had higher correlations with the FRS Scales, FACES-III Perceived Scales, and some PSI Scales. Correlations between the FSS and the FILE were negligible.

Correlations between the modified FSS and the other modified family scales are presented in Table 47. In general, the correlations between the modified measure were similar in magnitude and direction as the unmodified correlations.

Table 46

Intercorrelation Between FSS and Other Family Measures

	FSS Total	FSS General Prof. Serv.	FSS Speciali. Prof. Serv.	FSS Informal Kinship	FSS Formal Kinship	FSS Social Organi.	FSS Nuclear Family
FRS External Support	.3465	.1468	.1697	.3643	.2088	.2171	.2773
FRS Physical Resources	.2325	.1254	.1470	.2188	.1481	.1206	.1853
FRS Time Availability	.3199	.1573	.1317	.3360	.2067	.1735	.2849
FRS General Resources	.3054	.1297	.1690	.2958	.1813	.1819	.2799
FRS Total Score	.3318	.1569	.1642	.3354	.2051	.1866	.2927
FACES-III Perceived Cohesion	.2678	.1231	.1554	.2376	.1367	.1684	.2845
FACES-III Perceived Adaptability	.2216	.1306	.0873	.2356	.1073	.1923	.1419
FACES-III Ideal Cohesion	.1523	.0480	.1424	.1130	.0346	.1158	.1817
FACES-III Ideal Adaptability	.0604	.0442	.0547	.0723	-.0183	.0680	.0184
PSI Child Adaptability	.1232	.0251	.0158	.1472	.0606	.0948	.1455
PSI Child Acceptability	.1182	.0983	-.0417	.1480	.0927	.0587	.1308
PSI Child Demandingness	.0342	.0259	-.1061	.0994	.0448	-.0048	.0622
PSI Child Mood	.1316	.0623	.0609	.1063	.1000	.1149	.1004
PSI Child Reinforces Parent	.1374	.1113	.0910	.1131	.0664	.0772	.1211
PSI Child Distractability/Hyperactivity	.1306	.0448	.0071	.1578	.0730	.1016	.1402
PSI Parent Depression	.1588	.1223	.0399	.1792	.0985	.0675	.1674
PSI Parent Attachment	.1971	.1164	.1365	.1772	.0869	.1277	.1242
PSI Parent Restriction of Role	.1713	.0814	.0463	.1913	.1170	.1227	.1258
PSI Parent Sense of Comprehension	.0938	-.0084	.0384	.1384	.0009	.0578	.1369
PSI Parent Social Isolation	.2268	.1191	.1246	.2639	.1049	.1444	.3746
PSI Parent Relationship with Spouse	.2880	.1118	.1251	.2872	.1417	.1395	.1346
PSI Parent Health	.1526	.0655	.0796	.1510	.0762	.1113	.2446
PSI Total Stress	.2442	.1182	.0647	.2750	.1341	.1475	.1359
FILE Total	-.0676	.0020	-.0429	-.0907	-.0242	.0147	-.1176
FILE Family Legal Violations	-.0398	.0364	-.0162	-.0280	-.0436	-.0272	-.0798
FILE Transitions In and Out	-.0114	.0461	-.0518	-.0003	.0295	-.0008	-.0665
FILE Losses	.0387	.0654	-.0082	.0262	.0589	.0475	-.0203
FILE Illness & Family Care Strains	.0236	.0630	-.0037	.0237	.0436	.0110	-.0370
FILE Work/Family Transitions	.0288	-.0144	.0317	-.0304	.0626	.0310	.0614
FILE Financial & Business Strains	-.0236	-.0341	-.0292	-.0464	-.0174	.0461	-.0013
FILE Intra-Family Strains	-.1265	-.0417	-.0262	-.1289	-.1286	-.0101	-.1783
FILE Marital Status	-.1490	-.0240	-.0746	-.1498	-.0386	-.0527	-.2728
FILE Pregnancy & Childbirth Strains	-.0051	.0859	-.1402	-.0110	.0950	-.0014	-.0156

Table 47

Intercorrelation Between *Modified FSS* and Other Modified Family Measures

	FSS Family/Formal Kin	FSS Friends	FSS Informal Support	FSS Social Groups	FSS Profess. Support	FSS Total Support
FRS Physical Resources	.0912	.1725	.1332	.0486	.0820	.1435
FRS Basic Resources	.1985	.3298	.2609	.1388	.1481	.2915
FRS Health/Medical	.1552	.2211	.2220	.1011	.1335	.2272
FRS Personal Time	.2172	.3096	.2568	.1569	.1273	.2890
FRS Family Time	.1562	.2508	.2036	.0883	.0512	.2018
FRS Extra Money	.2219	.3342	.2706	.1836	.1413	.3108
FRS Total Resources	.2364	.3622	.3009	.1691	.1568	.3318
FACES-III Perceived Cohesion	.1689	.2871	.2267	.1685	.1430	.2678
FACES-III Perceived Adaptability	.1088	.1764	.1436	.1482	.0533	.1668
FACES-III Perceived Democratic Family Style	.0704	.1668	.2110	.1711	.0985	.1893
FACES-III Ideal Cohesion	.0468	.1004	.0995	.1249	.1069	.1284
FACES-III Ideal Adaptability	.0187	.0193	.0250	.0693	.0140	.0375
FACES-III Ideal Democratic Family Style	-.0313	.0490	.0793	.1276	.0723	.0749
PSI Child Adaptability	.0718	.1064	.1098	.0653	-.0106	.0899
PSI Child Acceptability	.1237	.1275	.1499	.0830	-.0560	.1122
PSI Child Demandingness	.0983	.1177	.0992	.0558	-.0621	.0802
PSI Child Mood	.0962	.1390	.1314	.0719	-.0313	.1066
PSI Child Reinforces Parent	.0808	.1193	.1467	.0591	.1115	.1420
PSI Child Distractibility/Hyperactivity	.0978	.1536	.1164	.1052	.0211	.1306
PSI Parent Depression	.0543	.1549	.1447	.0526	.0346	.1168
PSI Parent Restriction of Role	.0914	.1646	.1802	.0999	.0509	.1562
PSI Parent Attachment	.1198	.2510	.2448	.1423	.1526	.2450
PSI Parent Sense of Competence	-.0083	.0295	.0110	-.0282	-.0282	-.0075
PSI Parent Social Isolation	.1884	.3063	.2632	.1824	.1508	.2939
PSI Parent Relationship with Spouse	.1848	.4012	.2300	.1408	.1177	.2880
PSI Parent Health	.0751	.0999	.0612	.0240	.0374	.0819
PSI Total Stress	.1652	.2884	.2472	.1433	.0708	.2442
FILE Total	-.0349	-.1569	-.0132	-.0039	-.0421	-.0676
FILE Family Legal Violations	-.0535	-.0501	-.0148	-.0361	.0058	-.0398
FILE Transitions In and Out	.0115	-.0533	.0032	.0197	-.0229	-.0114
FILE Losses	.0476	-.0226	.0829	.0275	.0036	.0387
FILE Illness & Family Care Strains	.0257	-.0070	.0650	-.0028	.0022	.0236
FILE Work/Family Transitions	.0657	.0009	.0260	-.0151	.0145	.0288
FILE Financial & Business Strains	-.0085	-.0807	.0108	.0499	-.0486	-.0236
FILE Intra/Family Strains	-.1340	-.1985	-.0811	-.0147	-.0316	-.1265
FILE Marital Status	-.0754	-.2766	-.0760	-.0646	-.0684	-.1490
FILE Pregnancy & Childbirth Strains	.0947	-.0318	.0099	-.0043	-.0929	-.0051

Family Resources Scale

Descriptive data for the FRS at Year 1 and the variance-covariance matrices on which structural analyses were based are presented in Technical Appendix C. These matrices may be employed for further analyses by interested readers or to replicate the present results.

Internal Consistency and Test-Retest Reliability

For the FRS, two scoring systems were investigated. Both were derived from an exploratory factor analysis by Dunst and Leet (1985). The first scoring system used only the highest factor loading for each item. The second scoring system allowed items to load on more than one factor if the factor loading was greater in magnitude than .30. In both cases, four factors were identified: General Resources, Time Availability, Physical Resources, and External Support. Generally, estimates of internal consistency and test-retest reliability for the FRS subscales were consistent with those presented previously in the literature. Results are summarized in Tables 48 and 49.

Table 48

Internal Consistency Reliability of FRS Data

FRS Scales	Internal Consistency Coefficient
FRS Scoring with no double loadings	
General Resources	.92
Time Availability	.88
Physical Resources	.56
External Support	.61
FRS Scoring (loadings > .30)	
General Resources	.92
Time Availability	.91
Physical Resources	.79
External Support	.72
FRS Total	.94

Table 49

Test-Retest Reliability Coefficients for FRS Data

FRS Scales	Year1-Year2	Year1-Year3	Year2-Year3
FRS Scoring with no double loadings			
General Resources	.74	.64	.73
Time Availability	.58	.55	.67
Physical Resources	.51	.43	.58
External Support	.55	.48	.53
FRS Scoring (loadings > .30)			
General Resources	.72	.63	.72
Time Availability	.65	.61	.69
Physical Resources	.60	.55	.64
External Support	.63	.56	.61
FRS Total	.71	.63	.72

Confirming Structure

Confirmation of the two proposed factor structures of the FRS began with the estimation of a null model. The null model assumes complete independence of all observed measurements. Essentially, this means that each item of the instrument is considered to be its own factor. The null model fit statistics are a baseline from which to further judge future models. Fit statistics for the null model for the FRS were:

- $\chi^2 = 14,397.91$ ($p < .001$)
- $\chi^2/df = 33.0$ ($df = 435$)
- GFI = .219
- AGFI = .165
- RMR = .421

Fit statistics for the four factor model where only the highest factor loadings were used were:

- $\chi^2 = 3021.04$ ($p < .001$)
- $\chi^2/df = 7.6$ ($df = 399$)
- GFI = .785
- AGFI = .745
- RMR = .065

Fit statistics for the four factor model allowing double loading were:

- $\chi^2 = 2690.51$ ($p < .001$)
- $\chi^2/df = 7.0$ ($df = 385$)
- GFI = .810
- AGFI = .770
- RMR = .059

The high χ^2 values and relatively low fit indexes suggest that the models tested did not fit the data well. Thus, analyses continued with exploratory procedures.

Improving Structure

A series of models were tested with the small subset of data used for the exploratory analyses ($n = 345$). The "best" model identified was a 6 factor model. To improve model fit, two error term were allowed to correlate. The six factor model, presented in Figure 4, had the following fit statistics:

- $\chi^2 = 871.88$ ($p < .001$)
- $\chi^2/df = 2.3$ ($df = 386$)
- GFI = .865
- AGFI = .837
- RMR = .063

Intercorrelations among factors (Phi Matrix) are presented in Table 50. The improved model showed a noteworthy, and statistically significant, improvement on all fit indexes. The fit statistics suggest that there continues to be some misspecification in the model. However, attempts at continued improvement resulted in less parsimonious models with limited change in fit statistics. A summary of the six factor solution is presented in Table 51.

Table 50
Intercorrelations Between Modified FRS Factors (Phi Matrix)

Factor	1.	2.	3.	4.	5.	6.
1. Physical Resources	1.000					
2. Basic Resources	.744	1.000				
3. Medical Resources	.451	.752	1.000			
4. Personal Time	.347	.615	.496	1.000		
5. Family Time	.335	.309	.268	.592	1.000	
6. Extra Money	.474	.816	.700	.704	.361	1.000

Table 51

FRS Six Factor Solution

FRS Factor (Subscale)	Item Number and Content
Physical Resources	1. Food for 2 meals a day 2. House or apartment 5. Heat for house 6. Indoor plumbing/water
Basic Resources	3. Money to buy necessities 4. Money for clothes 7. Money for monthly bills 8. Good job for yourself or spouse 11. Dependable transportation 13. Furniture for home 18. Telephone or access to one 20. Child care/day care 21. Money for special equipment 26. Toys for children
Medical/Health Resources	9. Medical care for family 10. Public assistance 21. Money for special equipment 22. Dental care
Personal Time/support	12. Time to get enough sleep/rest 14. Time to be by self 17. Time to be with spouse/friends 19. Babysitting 23. Someone to talk to 24. Time to socialize 25. Time to keep in shape
Family Time	15. Time for family to be together 16. Time to be with children 17. Time to be with spouse/friend
Extra Money	27. Money to buy things for self 28. Money for family entertainment 29. Money to save 30. Travel/vacation

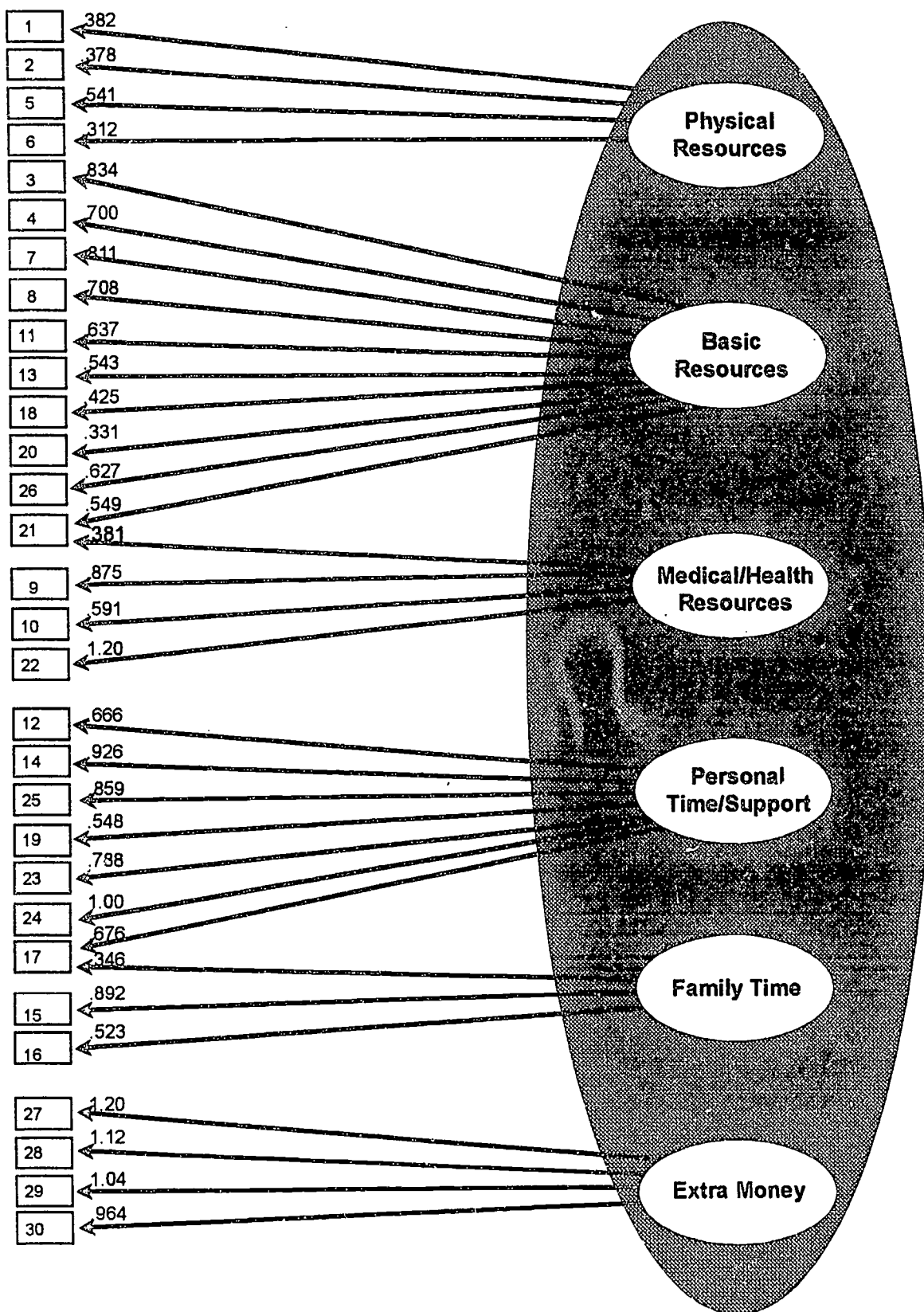


Figure 4. Structural Model for the FRS

Note: Dark circle indicates all factors are correlated. The Phi Matrix is presented in table 50.

Confirming New Structure and Measuring Invariance

Confirming structure. The six factor model for the FRS was replicated with an independent sample, the remainder of the Year 1 data ($n = 577$). The parameter estimates generated with the $n = 345$ sample were fit to the new sample (e.g., all λ were constrained).

The six factor model with the path values constrained resulted in the following fit statistics:

- $\chi^2 = 1551.47$ ($p < .001$)
- $\chi^2/df = 3.7$ ($df = 418$)
- GFI = .843
- AGFI = .826
- RMR = .118

As would be expected, there was some decrease in fit statistics and an increase in the χ^2 value.

There continues to be misspecification in the model, as evidenced by the lower fit statistics. However, the present model is still psychometrically stronger than that proposed by the author of the instrument.

Invariance analyses for the FRS. The six factor model for the FRS was also tested for invariance across time. Using a subset of the sample for which only Year 1 and Year 2 data were available ($n = 208$) were used to assess the stability of the model of a one year time period. The analyses were conducted by simultaneously testing for invariance across groups, specifically focusing on the factor loadings. The model was constrained such that the λ matrix (factor loadings) was invariant over groups.

Fit statistics for the analyses across one year were:

- $\chi^2 = 1879.11$ ($p < .001$)
- $\chi^2/df = 2.3$ ($df = 804$)
- GFI = .745
- RMR = .104

A similar analyses was conducted across two years using a subset of the sample for which all three data points were available ($n = 369$). Again the λ was constrained to be invariant across all three time periods. The fit statistics were:

- $\chi^2 = 3252.32$ ($p < .001$)
- $\chi^2/df = 2.7$ ($df = 1222$)

- GFI = .823
- RMR = .063

Results of the invariance analyses suggest that the six factor model identified for the FRS was less invariant over one year than over a two year period. This is likely an artifact of the particular sample. Additionally, with the increased number of items on the FRS and the small sample size for the Year 1 - Year 2 sample ($n = 208$), less stable parameter estimates would be expected.

Internal consistency and test-retest coefficients for the modified FRS scale scores were calculated and are presented in Tables 52 and 53.

Table 52

Internal Consistency Reliability of Modified FRS Scales

FRS Scales	Internal Consistency Coefficient
Physical Resources	.69
Basic Resources	.86
Medical/Health Resources	.74
Personal Time	.87
Family Time	.77
Extra Money	.90

Table 53

Test-Retest Reliability Coefficients for Modified FRS Scales

FRS Scales	Year 1 - Year 2	Year 1 - Year 3	Year 2 - Year 3
FRS Scoring with no Double Loadings			
Physical Resources	.41	.38	.48
Basic Resources	.71	.63	.70
Medical/Health Resources	.59	.50	.54
Personal Time	.62	.58	.69
Family Time	.50	.48	.61
Extra Money	.68	.60	.66

Normative Data

Percentile ranks for the four original FRS scales are presented in Tables 54 - 57. Percentiles were calculated on the full sample of 922 subjects. Because these data are unique in their breadth and diversity, the normative data presented should be used when interpreting scores from a family having a child with a disability.

Table 54

Percentile Ranks for FRS External Support Scale (double loading scoring)

Percentile	Value	Percentile	Value	Percentile	Value
1.00	12.000	2.00	13.000	3.00	14.000
4.00	14.999	5.00	15.000	6.00	15.140
7.00	15.996	8.00	16.000	9.00	16.140
10.00	16.990	11.00	17.000	12.00	17.138
13.00	18.000	14.00	18.000	15.00	18.140
16.00	18.900	17.00	18.990	18.00	19.000
19.00	19.130	20.00	19.962	21.00	20.000
22.00	20.000	23.00	20.130	24.00	20.140
25.00	20.158	26.00	20.920	27.00	21.000
28.00	21.000	29.00	21.130	30.00	21.140
31.00	21.140	32.00	21.824	33.00	22.000
34.00	22.000	35.00	22.007	36.00	22.130
37.00	22.140	38.00	22.140	39.00	22.990
40.00	23.000	41.00	23.000	42.00	23.130
43.00	23.140	44.00	23.140	45.00	23.370
46.00	23.990	47.00	23.998	48.00	24.000
49.00	24.000	50.00	24.130	51.00	24.130
52.00	24.140	53.00	24.142	54.00	24.464
55.00	24.990	56.00	25.000	57.00	25.000
58.00	25.044	59.00	25.130	60.00	25.130
61.00	25.140	62.00	25.140	63.00	25.140
64.00	25.140	65.00	25.736	66.00	25.990
67.00	26.000	68.00	26.000	69.00	26.130
70.00	26.130	71.00	26.130	72.00	26.140
73.00	26.140	74.00	26.140	75.00	26.905
76.00	27.000	77.00	27.000	78.00	27.128
79.00	27.130	80.00	27.130	81.00	27.140
82.00	27.140	83.00	27.140	84.00	27.815
85.00	28.000	86.00	28.000	87.00	28.130
88.00	28.130	89.00	28.140	90.00	28.140
91.00	28.159	92.00	29.000	93.00	29.000
94.00	29.140	95.00	29.140	96.00	29.140
97.00	30.000	98.00	30.000	99.00	30.000

N = 922

Table 55

Percentile Ranks for FRS Physical Resources Scale (double loading scoring)

Percentile	Value	Percentile	Value	Percentile	Value
1.00	17.000	2.00	19.064	3.00	20.278
4.00	21.140	5.00	22.000	6.00	23.000
7.00	23.000	8.00	24.000	9.00	24.000
10.00	24.669	11.00	25.000	12.00	25.106
13.00	25.140	14.00	26.000	15.00	26.000
16.00	26.140	17.00	26.140	18.00	27.000
19.00	27.000	20.00	27.140	21.00	27.140
22.00	28.000	23.00	28.000	24.00	28.140
25.00	28.140	26.00	29.000	27.00	29.000
28.00	29.000	29.00	29.140	30.00	29.140
31.00	30.000	32.00	30.000	33.00	30.000
34.00	30.140	35.00	30.140	36.00	30.140
37.00	30.140	38.00	30.830	39.00	31.000
40.00	31.000	41.00	31.000	42.00	31.000
43.00	31.140	44.00	31.140	45.00	31.140
46.00	31.140	47.00	32.000	48.00	32.000
49.00	32.000	50.00	32.000	51.00	32.140
52.00	32.140	53.00	32.140	54.00	32.140
55.00	32.140	56.00	33.000	57.00	33.000
58.00	33.000	59.00	33.000	60.00	33.112
61.00	33.140	62.00	33.140	63.00	33.140
64.00	33.140	65.00	33.140	66.00	33.140
67.00	33.218	68.00	34.000	69.00	34.000
70.00	34.000	71.00	34.000	72.00	34.140
73.00	34.140	74.00	34.140	75.00	34.140
76.00	34.140	77.00	34.140	78.00	34.140
79.00	34.140	80.00	34.140	81.00	34.140
82.00	34.140	83.00	34.140	84.00	34.140
85.00	34.140	86.00	34.140	87.00	34.140
88.00	34.140	89.00	34.140	90.00	35.000
91.00	35.000	92.00	35.000	93.00	35.000
94.00	35.000	95.00	35.000	96.00	35.000
97.00	35.000	98.00	35.000	99.00	35.000

N = 922

Table 56

Percentile Ranks for FRS Time Availability Scale (double loading scoring)

Percentile	Value	Percentile	Value	Percentile	Value
1.00	18.000	2.00	20.000	3.00	21.193
4.00	23.000	5.00	24.000	6.00	25.000
7.00	25.000	8.00	26.000	9.00	27.000
10.00	27.000	11.00	28.000	12.00	23.000
13.00	29.000	14.00	29.000	15.00	30.000
16.00	30.000	17.00	30.319	18.00	31.000
19.00	31.000	20.00	32.000	21.00	32.000
22.00	32.000	23.00	33.000	24.00	33.000
25.00	33.000	26.00	33.000	27.00	34.000
28.00	34.000	29.00	34.007	30.00	35.000
31.00	35.000	32.00	35.000	33.00	35.533
34.00	36.000	35.00	36.000	36.00	36.177
37.00	37.000	38.00	37.000	39.00	37.000
40.00	38.000	41.00	38.000	42.00	38.000
43.00	38.458	44.00	39.000	45.00	39.000
46.00	39.000	47.00	39.000	48.00	40.000
49.00	40.000	50.00	40.000	51.00	41.000
52.00	41.000	53.00	41.000	54.00	42.000
55.00	42.000	56.00	42.000	57.00	42.000
58.00	43.000	59.00	43.000	60.00	43.000
61.00	43.000	62.00	44.000	63.00	44.000
64.00	44.000	65.00	45.000	66.00	45.000
67.00	45.000	68.00	46.000	69.00	46.000
70.00	46.000	71.00	46.000	72.00	47.000
73.00	47.000	74.00	47.480	75.00	48.000
76.00	48.000	77.00	48.000	78.00	49.000
79.00	49.000	80.00	49.000	81.00	49.808
82.00	50.000	83.00	50.527	84.00	51.000
85.00	52.000	86.00	52.000	87.00	52.000
88.00	53.000	89.00	54.000	90.00	54.000
91.00	55.000	92.00	55.480	93.00	56.000
94.00	57.000	95.00	58.000	96.00	58.000
97.00	60.000	98.00	60.000	99.00	60.000

N = 922

Table 57

Percentile Ranks for FRS General Resources Scale (double loading scoring)

Percentile	Value	Percentile	Value	Percentile	Value
1.00	43.000	2.00	46.064	3.00	49.938
4.00	51.000	5.00	53.021	6.00	54.053
7.00	55.000	8.00	56.560	9.00	57.079
10.00	59.000	11.00	59.000	12.00	60.000
13.00	60.680	14.00	61.140	15.00	62.000
16.00	62.147	17.00	63.000	18.00	64.000
19.00	65.000	20.00	65.446	21.00	66.000
22.00	66.150	23.00	67.146	24.00	68.140
25.00	69.000	26.00	69.140	27.00	70.000
28.00	70.140	29.00	71.000	30.00	71.009
31.00	72.000	32.00	72.050	33.00	72.264
34.00	73.000	35.00	73.000	36.00	73.140
37.00	74.000	38.00	74.140	39.00	74.680
40.00	75.000	41.00	75.140	42.00	75.986
43.00	76.125	44.00	76.140	45.00	76.174
46.00	77.000	47.00	77.000	48.00	77.140
49.00	77.722	50.00	78.140	51.00	78.140
52.00	78.897	53.00	79.140	54.00	79.140
55.00	80.007	56.00	81.000	57.00	81.015
58.00	81.140	59.00	81.831	60.00	82.140
61.00	82.150	62.00	83.000	63.00	83.140
64.00	83.255	65.00	84.000	66.00	84.140
67.00	84.140	68.00	84.858	69.00	85.000
70.00	85.140	71.00	85.249	72.00	86.000
73.00	86.140	74.00	86.177	75.00	87.140
76.00	87.150	77.00	88.000	78.00	88.140
79.00	88.647	80.00	89.000	81.00	89.140
82.00	89.140	83.00	90.000	84.00	90.140
85.00	90.140	86.00	90.960	87.00	91.001
88.00	91.924	89.00	92.140	90.00	92.140
91.00	93.000	92.00	93.140	93.00	94.000
94.00	94.140	95.00	94.140	96.00	94.140
97.00	94.140	98.00	95.000	99.00	95.000

N = 922

Table 58

Percentile Ranks for FRS Total Score

Percentile	Value	Percentile	Value	Percentile	Value
1.00	69.000	2.00	75.255	3.00	78.683
4.00	81.000	5.00	83.992	6.00	86.049
7.00	87.000	8.00	88.998	9.00	90.009
10.00	91.354	11.00	92.262	12.00	93.904
13.00	95.000	14.00	96.000	15.00	97.130
16.00	98.660	17.00	99.091	18.00	99.930
19.00	100.569	20.00	101.136	21.00	102.108
22.00	103.990	23.00	104.000	24.00	104.995
25.00	105.998	26.00	107.000	27.00	107.840
28.00	108.130	29.00	108.701	30.00	109.090
31.00	110.018	32.00	111.134	33.00	112.000
34.00	112.140	35.00	112.831	36.00	113.036
37.00	113.810	38.00	114.576	39.00	115.000
40.00	115.140	41.00	115.967	42.00	116.140
43.00	116.979	44.00	117.000	45.00	117.140
46.00	118.000	47.00	118.138	48.00	118.817
49.00	119.140	50.00	120.000	51.00	120.140
52.00	121.000	53.00	121.535	54.00	122.000
55.00	122.484	56.00	123.000	57.00	123.160
58.00	124.000	59.00	124.140	60.00	124.436
61.00	125.140	62.00	125.548	63.00	126.000
64.00	126.467	65.00	127.130	66.00	128.000
67.00	128.130	68.00	128.990	69.00	129.139
70.00	130.130	71.00	130.186	72.00	131.136
73.00	131.148	74.00	132.130	75.00	132.647
76.00	133.000	77.00	133.140	78.00	134.056
79.00	134.140	80.00	135.004	81.00	135.870
82.00	136.140	83.00	137.140	84.00	138.000
85.00	138.140	86.00	138.990	87.00	139.140
88.00	140.031	89.00	140.990	90.00	141.140
91.00	141.999	92.00	142.636	93.00	144.051
94.00	145.000	95.00	146.870	96.00	147.140
97.00	148.109	98.00	148.990	99.00	149.802

N = 922

Table 59

Descriptive Statistics for FRS Scales (Double Loadings)

Variables	Mean	Std. Dev.
External Support	23.27	4.37
Physical Resources	30.67	4.22
Time Availability	40.41	10.03
General Resources	76.69	12.80
Total Score	118.04	18.86

Percentile ranks and descriptive statistics were computed for the modified six factor solution for the FRS. It is recommended that these data be used interpretively with families having children with disabilities.

Table 60

Percentile Ranks for MODIFIED FRS Physical Resources Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	12.000	2.00	13.000	3.00	14.000
4.00	15.000	5.00	15.000	6.00	16.000
7.00	16.000	8.00	16.000	9.00	16.000
10.00	16.249	11.00	17.000	12.00	17.000
13.00	17.000	14.00	18.000	15.00	18.000
16.00	18.000	17.00	18.000	18.00	18.000
19.00	18.000	20.00	18.000	21.00	18.000
22.00	18.000	23.00	19.000	24.00	19.000
25.00	19.000	26.00	19.000	27.00	19.000
28.00	19.000	29.00	19.000	30.00	19.000
31.00	19.000	32.00	19.000	33.00	19.740
34.00	19.760	35.00	20.000	36.00	20.000
37.00	20.000	38.00	20.000	39.00	20.000
40.00	20.000	41.00	20.000	42.00	20.000
43.00	20.000	44.00	20.000	45.00	20.000
46.00	20.000	47.00	20.000	48.00	20.000
49.00	20.000	50.00	20.000	51.00	20.000
52.00	20.000	53.00	20.000	54.00	20.000
55.00	20.000	56.00	20.000	57.00	20.000
58.00	20.000	59.00	20.000	60.00	20.000
61.00	20.000	62.00	20.000	63.00	20.000
64.00	20.000	65.00	20.000	66.00	20.000
67.00	20.000	68.00	20.000	69.00	20.000
70.00	20.000	71.00	20.000	72.00	20.000
73.00	20.000	74.00	20.000	75.00	20.000
76.00	20.000	77.00	20.000	78.00	20.000
79.00	20.000	80.00	20.000	81.00	20.000
82.00	20.000	83.00	20.000	84.00	20.000
85.00	20.000	86.00	20.000	87.00	20.000
88.00	20.000	89.00	20.000	90.00	20.000
91.00	20.000	92.00	20.000	93.00	20.000
94.00	20.000	95.00	20.000	96.00	20.000
97.00	20.000	98.00	20.000	99.00	20.000

N = 922

Table 61

Percentile Ranks for MODIFIED FRS Basic Resources Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	22.000	2.00	24.000	3.00	25.997
4.00	27.999	5.00	29.000	6.00	29.606
7.00	30.000	8.00	31.000	9.00	32.000
10.00	32.000	11.00	32.990	12.00	33.000
13.00	33.990	14.00	34.000	15.00	34.233
16.00	35.000	17.00	35.000	18.00	35.991
19.00	36.349	20.00	36.996	21.00	37.000
22.00	37.990	23.00	38.000	24.00	38.000
25.00	38.760	26.00	39.000	27.00	39.000
28.00	39.004	29.00	39.990	30.00	40.000
31.00	40.000	32.00	40.734	33.00	40.990
34.00	41.000	35.00	41.000	36.00	41.150
37.00	41.736	38.00	41.990	39.00	42.000
40.00	42.000	41.00	42.000	42.00	42.157
43.00	42.830	44.00	42.990	45.00	43.000
46.00	43.000	47.00	43.670	48.00	43.990
49.00	43.993	50.00	44.000	51.00	44.000
52.00	44.000	53.00	44.739	54.00	44.990
55.00	45.000	56.00	45.000	57.00	45.000
58.00	45.990	59.00	46.000	60.00	46.000
61.00	46.000	62.00	46.000	63.00	46.670
64.00	46.990	65.00	46.990	66.00	46.990
67.00	47.000	68.00	47.000	69.00	47.000
70.00	47.163	71.00	47.673	72.00	47.990
73.00	47.990	74.00	47.990	75.00	48.000
76.00	48.000	77.00	48.000	78.00	48.000
79.00	48.000	80.00	48.150	81.00	48.990
82.00	48.990	83.00	48.990	84.00	48.990
85.00	48.990	86.00	49.000	87.00	49.000
88.00	49.000	89.00	49.075	90.00	50.000
91.00	50.000	92.00	50.000	93.00	50.000
94.00	50.000	95.00	50.000	96.00	50.000
97.00	50.000	98.00	50.000	99.00	50.000

N = 922

Table 62

Percentile Ranks for MODIFIED FRS Medical/Health Resources Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	6.000	2.00	7.000	3.00	8.000
4.00	8.000	5.00	9.000	6.00	10.000
7.00	10.085	8.00	11.000	9.00	11.000
10.00	11.290	11.00	12.000	12.00	12.000
13.00	12.000	14.00	12.140	15.00	12.365
16.00	13.000	17.00	13.000	18.00	13.000
19.00	13.115	20.00	13.140	21.00	13.621
22.00	14.000	23.00	14.000	24.00	14.000
25.00	14.105	26.00	14.140	27.00	14.140
28.00	14.820	29.00	15.000	30.00	15.000
31.00	15.000	32.00	15.140	33.00	15.140
34.00	15.140	35.00	15.680	36.00	16.000
37.00	16.000	38.00	16.000	39.00	16.000
40.00	16.000	41.00	16.140	42.00	16.140
43.00	16.140	44.00	16.140	45.00	16.140
46.00	16.820	47.00	17.000	48.00	17.000
49.00	17.000	50.00	17.000	51.00	17.073
52.00	17.140	53.00	17.140	54.00	17.140
55.00	17.140	56.00	17.675	57.00	17.820
58.00	17.820	59.00	18.000	60.00	18.000
61.00	18.000	62.00	18.000	63.00	18.000
64.00	18.140	65.00	18.140	66.00	18.140
67.00	18.140	68.00	18.140	69.00	18.140
70.00	18.140	71.00	18.539	72.00	18.960
73.00	19.000	74.00	19.000	75.00	19.000
76.00	19.000	77.00	19.140	78.00	19.140
79.00	19.140	80.00	19.140	81.00	19.140
82.00	19.140	83.00	19.140	84.00	19.140
85.00	19.140	86.00	19.140	87.00	19.140
88.00	19.140	89.00	19.140	90.00	19.140
91.00	19.140	92.00	20.000	93.00	20.000
94.00	20.000	95.00	20.000	96.00	20.000
97.00	20.000	98.00	20.000	99.00	20.000

N = 922

Table 63

Percentile Ranks for MODIFIED FRS Personal Time Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	10.000	2.00	11.000	3.00	12.000
4.00	13.000	5.00	14.000	6.00	14.000
7.00	14.000	8.00	15.000	9.00	15.000
10.00	16.000	11.00	16.000	12.00	17.000
13.00	17.000	14.00	17.000	15.00	17.967
16.00	18.000	17.00	18.000	18.00	18.108
19.00	19.000	20.00	19.000	21.00	19.770
22.00	20.000	23.00	20.000	24.00	20.000
25.00	20.000	26.00	21.000	27.00	21.000
28.00	21.000	29.00	21.000	30.00	21.770
31.00	22.000	32.00	22.000	33.00	22.000
34.00	22.000	35.00	22.000	36.00	23.000
37.00	23.000	38.00	23.000	39.00	23.000
40.00	23.000	41.00	23.000	42.00	23.000
43.00	23.000	44.00	23.770	45.00	24.000
46.00	24.000	47.00	24.000	48.00	24.000
49.00	24.000	50.00	24.770	51.00	25.000
52.00	25.000	53.00	25.000	54.00	25.000
55.00	25.000	56.00	25.308	57.00	26.000
58.00	26.000	59.00	26.000	60.00	26.000
61.00	27.000	62.00	27.000	63.00	27.000
64.00	27.000	65.00	27.000	66.00	28.000
67.00	28.000	68.00	28.000	69.00	28.000
70.00	28.000	71.00	28.000	72.00	29.000
73.00	29.000	74.00	29.000	75.00	29.000
76.00	29.000	77.00	29.000	78.00	30.000
79.00	30.000	80.00	30.000	81.00	30.000
82.00	30.000	83.00	31.000	84.00	31.000
85.00	31.000	86.00	31.000	87.00	32.000
88.00	32.000	89.00	32.000	90.00	33.000
91.00	33.000	92.00	33.010	93.00	34.000
94.00	34.000	95.00	35.000	96.00	35.000
97.00	35.000	98.00	35.000	99.00	35.000

N = 922

Table 64

Percentile Ranks for MODIFIED FRS Family Time Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	4.000	2.00	5.000	3.00	6.000
4.00	6.000	5.00	7.000	6.00	7.000
7.00	8.000	8.00	8.000	9.00	8.000
10.00	8.000	11.00	8.000	12.00	8.000
13.00	8.999	14.00	9.000	15.00	9.000
16.00	9.000	17.00	9.000	18.00	9.000
19.00	9.000	20.00	9.000	21.00	9.000
22.00	9.000	23.00	10.000	24.00	10.000
25.00	10.000	26.00	10.000	27.00	10.000
28.00	10.000	29.00	10.000	30.00	10.000
31.00	10.000	32.00	11.000	33.00	11.000
34.00	11.000	35.00	11.000	36.00	11.000
37.00	11.000	38.00	11.000	39.00	11.000
40.00	11.000	41.00	11.000	42.00	11.000
43.00	11.000	44.00	11.000	45.00	11.000
46.00	11.000	47.00	11.000	48.00	11.000
49.00	12.000	50.00	12.000	51.00	12.000
52.00	12.000	53.00	12.000	54.00	12.000
55.00	12.000	56.00	12.000	57.00	12.000
58.00	12.000	59.00	12.000	60.00	12.000
61.00	12.000	62.00	12.000	63.00	12.000
64.00	12.000	65.00	12.200	66.00	13.000
67.00	13.000	68.00	13.000	69.00	13.000
70.00	13.000	71.00	13.000	72.00	13.000
73.00	13.000	74.00	13.000	75.00	13.000
76.00	13.277	77.00	14.000	78.00	14.000
79.00	14.000	80.00	14.000	81.00	14.000
82.00	14.000	83.00	14.000	84.00	14.000
85.00	15.000	86.00	15.000	87.00	15.000
88.00	15.000	89.00	15.000	90.00	15.000
91.00	15.000	92.00	15.000	93.00	15.000
94.00	15.000	95.00	15.000	96.00	15.000
97.00	15.000	98.00	15.000	99.00	15.000

N = 922

Table 65

Percentile Ranks for MODIFIED FRS Extra Money Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	4.000	2.00	4.000	3.00	4.000
4.00	4.000	5.00	4.150	6.00	5.000
7.00	5.000	8.00	5.000	9.00	6.000
10.00	6.000	11.00	6.000	12.00	6.000
13.00	6.000	14.00	6.000	15.00	6.216
16.00	7.000	17.00	7.000	18.00	7.000
19.00	7.000	20.00	7.000	21.00	7.000
22.00	8.000	23.00	8.000	24.00	8.000
25.00	8.000	26.00	8.000	27.00	8.000
28.00	8.010	29.00	9.000	30.00	9.000
31.00	9.000	32.00	9.000	33.00	9.000
34.00	9.000	35.00	9.010	36.00	10.000
37.00	10.000	38.00	10.000	39.00	10.000
40.00	10.000	41.00	10.000	42.00	10.000
43.00	10.000	44.00	10.480	45.00	11.000
46.00	11.000	47.00	11.000	48.00	11.000
49.00	11.000	50.00	11.000	51.00	11.000
52.00	11.480	53.00	12.000	54.00	12.000
55.00	12.000	56.00	12.000	57.00	12.000
58.00	12.000	59.00	12.000	60.00	13.000
61.00	13.000	62.00	13.000	63.00	13.000
64.00	13.000	65.00	13.000	66.00	13.000
67.00	13.852	68.00	14.000	69.00	14.000
70.00	14.000	71.00	14.000	72.00	14.000
73.00	15.000	74.00	15.000	75.00	15.000
76.00	15.000	77.00	16.000	78.00	16.000
79.00	16.000	80.00	16.000	81.00	16.000
82.00	16.000	83.00	16.527	84.00	17.000
85.00	17.000	86.00	17.480	87.00	18.000
88.00	18.000	89.00	18.000	90.00	18.000
91.00	19.000	92.00	19.000	93.00	20.000
94.00	20.000	95.00	20.000	96.00	20.000
97.00	20.000	98.00	20.000	99.00	20.000

N = 922

Table 66

Descriptive Statistics for Modified FRS Scales

Variable	Mean	Std Dev
Physical Resources	19.07	1.79
Basic Resources	42.37	6.86
Medical/Health Resources	16.11	3.35
Personal	24.44	6.19
Family	11.44	2.56
Extra Money	11.64	4.56

Validity Information

Intercorrelations between the unmodified FRS (using the scoring that allows double loading of items) and the other unmodified family measures are presented in Table 67. In general, the relationships between FRS scale scores and scores on the other family measures were low to moderate, ranging in magnitude from .003 to .444. The FRS Total Score correlated most highly with the FILE Total ($r = -.38$), PSI Total ($r = .41$), FSS Total ($r = .33$), and the FACES-III Perceived Cohesion ($r = .40$). FRS subscale scores showed a similar pattern of relationships as the total score. Specifically, correlations were lower for the PSI child domain scale scores, FACES-III Perceived Adaptability and Ideal Scales, and some FILE scales. Higher correlations for the FRS scales were with FSS Informal and Formal Kinship, PSI Restriction of Role and Social Isolation, and FILE financial strains.

Intercorrelations between the modified FRS and the other modified family measures are presented in Table 68. In general, the correlations between the modified measure were similar in magnitude and direction as the unmodified correlations.

Table 67

Intercorrelation Between FRS and Other Family Measures

	FRS External Support	FRS Physical Resources	FRS Time Availability	FRS General Resources	FRS Total Score
FSS Total	.3465	.2325	.3199	.3054	.3318
FSS General Professional Services	.1486	.1254	.1573	.1297	.1569
FSS Specialized Professional Services	.1697	.1470	.1317	.1690	.1642
FSS Informal Kinship	.3643	.2188	.3360	.2958	.3354
FSS Formal Kinship	.2088	.1481	.2067	.1813	.2051
FSS Social Organizations	.2171	.1206	.1735	.1819	.1866
FSS Nuclear Family	.2773	.1853	.2849	.2799	.2927
FACES-III Perceived Cohesion	.3470	.3058	.3751	.3650	.3990
FACES-III Perceived Adaptability	.1044	.0253	.0894	.0734	.0813
FACES-III Ideal Cohesion	.1305	.1537	.0809	.1693	.1483
FACES-III Adaptability	-.0345	-.0347	-.0918	-.0311	-.0548
PSI Child Adaptability	.2563	.2008	.2021	.1961	.2306
PSI Child Acceptability	.2095	.1560	.2336	.1492	.2172
PSI Child Demandingness	.1784	.0981	.1962	.0977	.1615
PSI Child Mood	.1519	.1200	.1563	.1358	.1634
PSI Child Reinforces Parent	.1448	.1420	.1400	.1485	.1630
PSI Child Distractability/Hyperactivity	.1949	.1871	.1659	.1950	.2022
PSI Parent Depression	.2856	.2378	.3237	.2403	.3096
PSI Parent Attachment	.1201	.1247	.1304	.1357	.1498
PSI Parent Restriction of Role	.3621	.2119	.3902	.2467	.3466
PSI Parent Sense of Competence	.2125	.1518	.2003	.2020	.2238
PSI Parent Social Isolation	.3434	.2261	.3501	.2615	.3279
PSI Parent Relationship with Spouse	.3715	.2406	.4443	.3075	.3938
PSI Parent Health	.2851	.1616	.3319	.2091	.2862
PSI Total Stress	.4036	.2915	.4209	.3237	.4091
FILE Total	-.3434	-.2654	-.4174	-.3132	-.3834
FILE Family Legal Violations	-.1568	-.1483	-.1327	-.1492	-.1593
FILE Transitions In and Out	-.0237	-.0095	-.0396	-.0387	-.0354
FILE Losses	-.0321	-.0090	-.0036	-.0271	-.0162
FILE Illness & Family Care Strains	-.1894	-.0987	-.1867	-.1344	-.1778
FILE Work/Family Transitions	-.1149	-.1235	-.1624	-.1247	-.1459
FILE Financial & Business Strains	-.2800	-.2678	-.3561	-.3119	-.3432
FILE Intra/Family Strains	-.3320	-.2365	-.4391	-.2658	-.3716
FILE Marital Strains	-.2326	-.1745	-.2281	-.2190	-.2357
FILE Pregnancy & Childbirth Strains	-.0920	-.0370	-.0756	-.0912	-.0888

Table 68

Intercorrelation Between *Modified* FRS and Other Modified Family Measures

	FRS Physical Resources	FRS Basic Resources	FRS Health/Medical	FRS Personal Time	FRS Family Time	FRS Extra Money	FRS Total Res.
FSS Family/Formal Kin	.0912	.1985	.1552	.2172	.1562	.2219	.2364
FSS Friends	.1725	.3298	.2211	.3096	.2508	.3342	.3622
FSS Informal Support	.1332	.2609	.2220	.2568	.2036	.2706	.3009
FSS Social Groups	.0468	.1388	.1011	.1569	.0883	.1836	.1691
FSS Professional Support	.0820	.1481	.1335	.1273	.0512	.1413	.1568
FSS Total Support	.1435	.2915	.2272	.2890	.2018	.3108	.3318
FACES-III Perceived Cohesion	.2637	.3555	.2729	.3151	.3359	.3307	.3990
FACES-III Perceived Adaptability	.0294	.0097	-.0057	.0252	-.0061	.0365	.0190
FACES-III Democratic Family Style	.0665	.0804	.0737	.1130	.0824	.1306	.1202
FACES-III Ideal Cohesion	.1547	.1560	.0604	.0182	.0552	.0391	.1014
FACES-III Ideal Adaptability	-.0020	-.0553	-.0626	-.1136	-.0943	-.0939	-.0952
FACES-III Ideal Demo. Family Style	.1035	.0515	.0584	.0001	-.0330	.0071	.0351
FACES-III PSI Child Adaptability	.1093	.1966	.1493	.1851	.0864	.1280	.1985
PSI Child Acceptability	.0565	.1615	.1240	.2790	.2670	.1209	.2195
PSI Child Demandingness	.0411	.1418	.1001	.2678	.2177	.1136	.1973
PSI Child Mood	.0900	.1726	.1256	.1833	.1209	.1198	.1841
PSI Child Reinforces Parent	.1546	.1707	.1034	.1608	.1207	.1135	.1791
PSI Child Distractibility/Hyperactivity	.1620	.2148	.1075	.1537	.1000	.1573	.2022
PSI Parent Depression	.1135	.2263	.1312	.2889	.2498	.1886	.2653
PSI Parent Restriction of Role	.0837	.2537	.1923	.4425	.2895	.2819	.3525
PSI Parent Attachment	.1850	.2541	.1462	.1494	.1043	.1765	.2261
PSI Sense of Competence	.0353	.0592	.0046	.1534	.1240	.0369	.0896
PSI Parent Social Isolation	.1614	.3155	.2424*	.4606	.3254	.3206	.4094
PSI Parent Relationship with Spouse	.1013	.2987	.2163	.4413	.3714	.3369	.3938
PSI Parent Health	.0476	.1247	.1019	.2141	.1691	.1448	.1798
PSI Total Stress	.1759	.3417	.2304	.4454	.3316	.3018	.4091
FILE Total	-.1144	-.2956	-.2539	-.4037	-.3511	-.3224	-.3834
FILE Family Legal Violations	-.1236	-.1669	-.1004	-.1229	-.1007	-.1226	-.1593
FILE Transitions In and Out	-.0192	-.0299	-.0203	-.0273	-.0169	-.0447	-.0354
FILE Losses	.0090	-.0274	-.0314	.0038	.0269	-.0282	-.0162
FILE Illness & Family Care Strains	-.0690	-.1435	-.1032	-.2039	-.1348	-.1399	-.1778
FILE Work/Family Transitions	-.0125	-.0965	-.1531	-.1474	-.1633	-.1125	-.1459
FILE Financial & Business Strains	-.0094	-.2756	-.2914	-.3064	-.2576	-.3302	-.3432
FILE Intra/Family Strains	-.0952	-.2555	-.1948	-.4516	-.4320	-.2813	-.3716
FILE Marital Status	-.1202	-.2230	-.1136	-.2077	-.1434	-.2244	-.2357
FILE Pregnancy & Childbirth Strains	-.0428	-.1035	-.0301	-.0727	.0106	-.0956	-.0888

Parenting Stress Index (PSI)

Descriptive data for the PSI at Year 1 are presented in Technical Appendix D. For the purpose of structural analyses, the child domain scales and parent domain scales were treated as independent. These matrices may be employed for further analyses by interested readers or to replicate the present results.

Internal Consistency and Test-Retest Reliability

Estimates of internal consistency and test-retest reliability for the PSI scales varies greatly but were consistent with those presented previously in the literature. Results are summarized in Tables 69 and 70.

Table 69

Internal Consistency Reliability of PSI Data

PSI Scale	Internal Consistency Coefficient
PSI Scales: Child Domain	
Adaptability	.63
Acceptability	.70
Demandingness	.52
Mood	.32
Distractability/Hyperactivity	.58
Reinforces Parent	.16
PSI Scales: Parent Domain	
Depression	.78
Attachment	.40
Restriction of Role	.80
Sense of Competence	.25
Social Isolation	.57
Relationship with Spouse	.76
Parent Health	.28
PSI Total	.91

Table 70
Test-Retest Reliability Coefficients for PSI Data

PSI Scale	Year1-Year2	Year1-Year3	Year2-Year3
PSI Scales: Child Domain			
Adaptability	.51	.48	.62
Acceptability	.64	.58	.73
Demandingness	.53	.46	.54
Mood	.38	.35	.41
Distractability/Hyperactivity	.50	.47	.55
Reinforces Parent	.35	.25	.33
PSI Scales: Parent Domain			
Depression	.57	.53	.59
Attachment	.42	.33	.39
Restriction of Role	.63	.60	.68
Sense of Competence	.50	.49	.58
Social Isolation	.50	.50	.51
Relationship with Spouse	.61	.57	.68
Parent Health	.49	.47	.51
PSI Total	.68	.64	.73

The results of the reliability analyses were generally consistent with those reported in the manual and in other studies. Some coefficients, however, were quite low in the present sample.

Confirming Structure

Confirmation of the proposed factor structure of the PSI began with the estimation of a null model. The null model assumes complete independence of all observed measurements. Essentially, this means that each item of the instrument is considered to be its own factor. The null model fit statistics are a baseline from which to further judge future models. The fit statistics for the null model for the PSI Child Domain were:

- o $\chi^2 = 12,725.50$ ($p < .001$)
- o $\chi^2/df = 11.8$ ($df = 1081$)
- o GFI = .373

- AGFI = .345
- RMR = .229

Fit statistics for the PSI Parent Domain null model were:

- $\chi^2 = 16,460$ ($p < .001$)
- $\chi^2/df = 11.5$ ($df = 1431$)
- GFI = .289
- AGFI = .262
- RMR = .241

The author's proposed factor structure for each the parent and child domain were tested. In testing the model, the factors (latent variables) were allowed to correlate and the error matrix (theta delta) was freed. Fit statistics for the author's six factor model for the Child Domain were:

- $\chi^2 = 5228.86$ ($p < .001$)
- $\chi^2/df = 5.1$ ($df = 1019$)
- CFI = .757
- AGFI = .731
- RMR = .090

Fit statistics for the author's seven factor model for the Parent Domain were:

- $\chi^2 = 4981.44$ ($p < .001$)
- $\chi^2/df = 3.7$ ($df = 1356$)
- GFI = .815
- AGFI = .797
- RMR = .070

The seven factor solution for the Parent Domain items on the PSI approached an acceptable fit to the data, especially considering the number of items involved. The six factor solution for the Child Domain did not perform as well, suggesting noteworthy misspecification in the model. In each case, it was hoped that some improvement in the models could be made. Thus, analyses continue with exploratory procedures.

Improving Structure

The large number of items on the PSI made the outlined analysis strategy for improving and confirming the structure of the PSI questionable. Since a higher ratio of subjects to items results in more stable the parameter estimates, conducting analyses with only 345 subjects was judged inadequate. Therefore, attempts at improving the structural model of the PSI were conducted with the full sample ($n = 922$)

Child Domain. A series of models were tested with the data ($n = 922$). The "best" model identified was a six factor model, a slight modification of the model proposed by Abidin. In total, 13 error terms were allowed to correlate in the final model. The six factor model, presented in Figure 5, had the following fit statistics:

- $\chi^2 = 3462.76$ ($p < .001$)
- $\chi^2/df = 3.5$ ($df = 1001$)
- GFI = .842
- AGFI = .822
- RMR = .082

Correlations between the child domain factors are presented in Table 71. The improved model showed a noteworthy, and statistically significant, improvement on all fit indexes. Although fit statistics for this model suggest continued misspecification, additional improvement for the model would have required deleting items and/or allowing more error terms to correlate. Thus, it was judged that the increase in model fit would not offset the loss of integrity of a well used instrument.

Table 71
Intercorrelations Between PSI Factors (Phi Matrix for Child Scale)

Factor	1	2	3	4	5	6
1. Distractibility	1.000					
2. Reinforces Parent	0.276	1.000				
3. Mood	0.529	0.498	1.000			
4. Acceptance	0.537	0.533	0.592	1.000		
5. Adaptability	0.545	0.577	0.914	0.669	1.000	
6. Demandingness	0.462	0.444	0.703	0.789	0.751	1.000

Parent Domain. A series of models were tested with the data ($n = 922$). The "best" model identified was a seven factor model, a slight modification of the model proposed by Abidin. Nine error terms were allowed to correlate in the final model. The seven factor model, presented in Figure 6, had the following fit statistics:

- $\chi^2 = 3517.52$ ($p < .001$)
- $\chi^2/df = 3.5$ ($df = 1343$)
- GFI = .867
- AGFI = .853
- RMR = .056

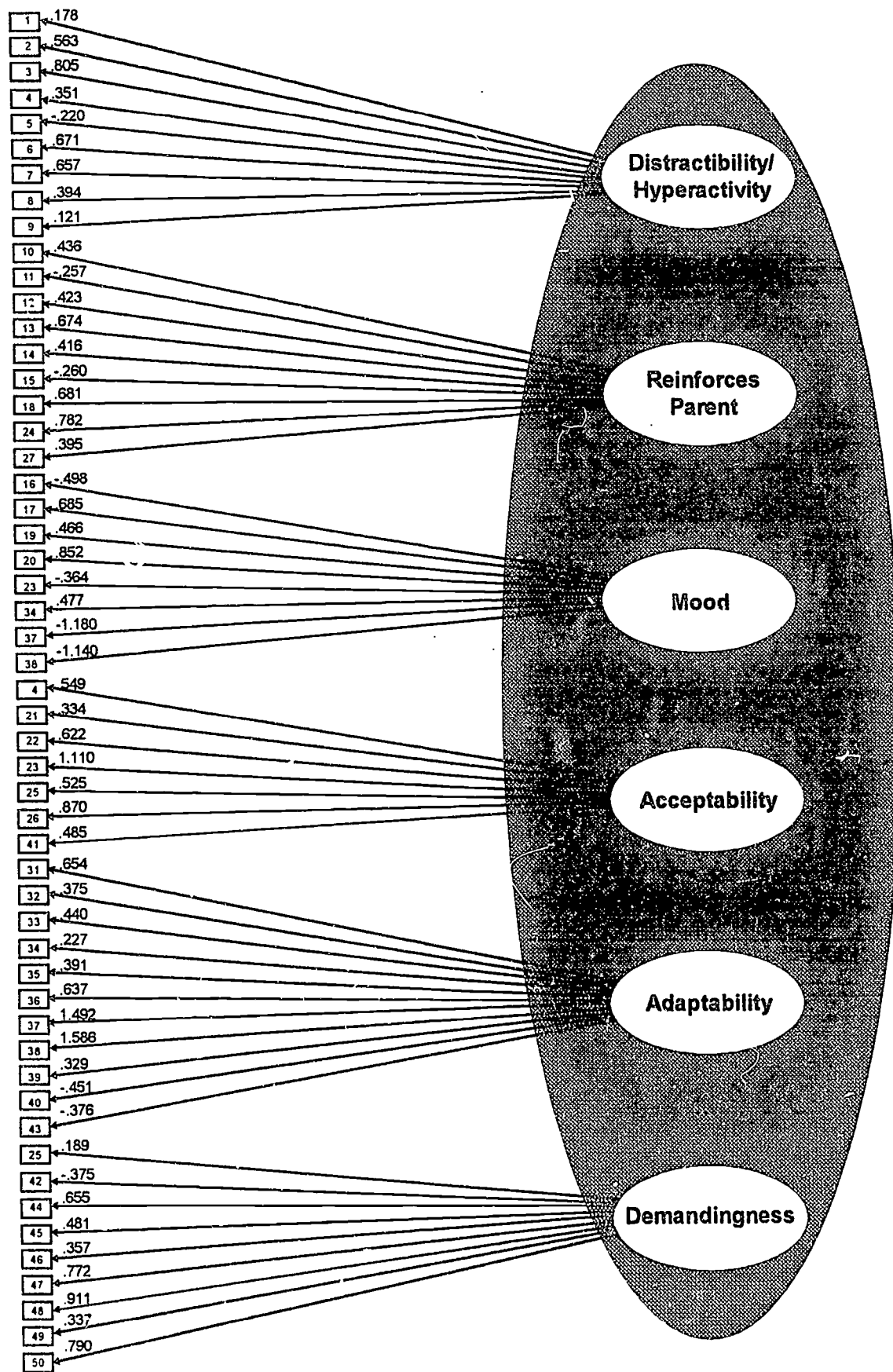


Figure 5. PSI Child Domain

Note: Dark circle indicates all factors are correlated. The Phi Matrix is presented in Table 71.

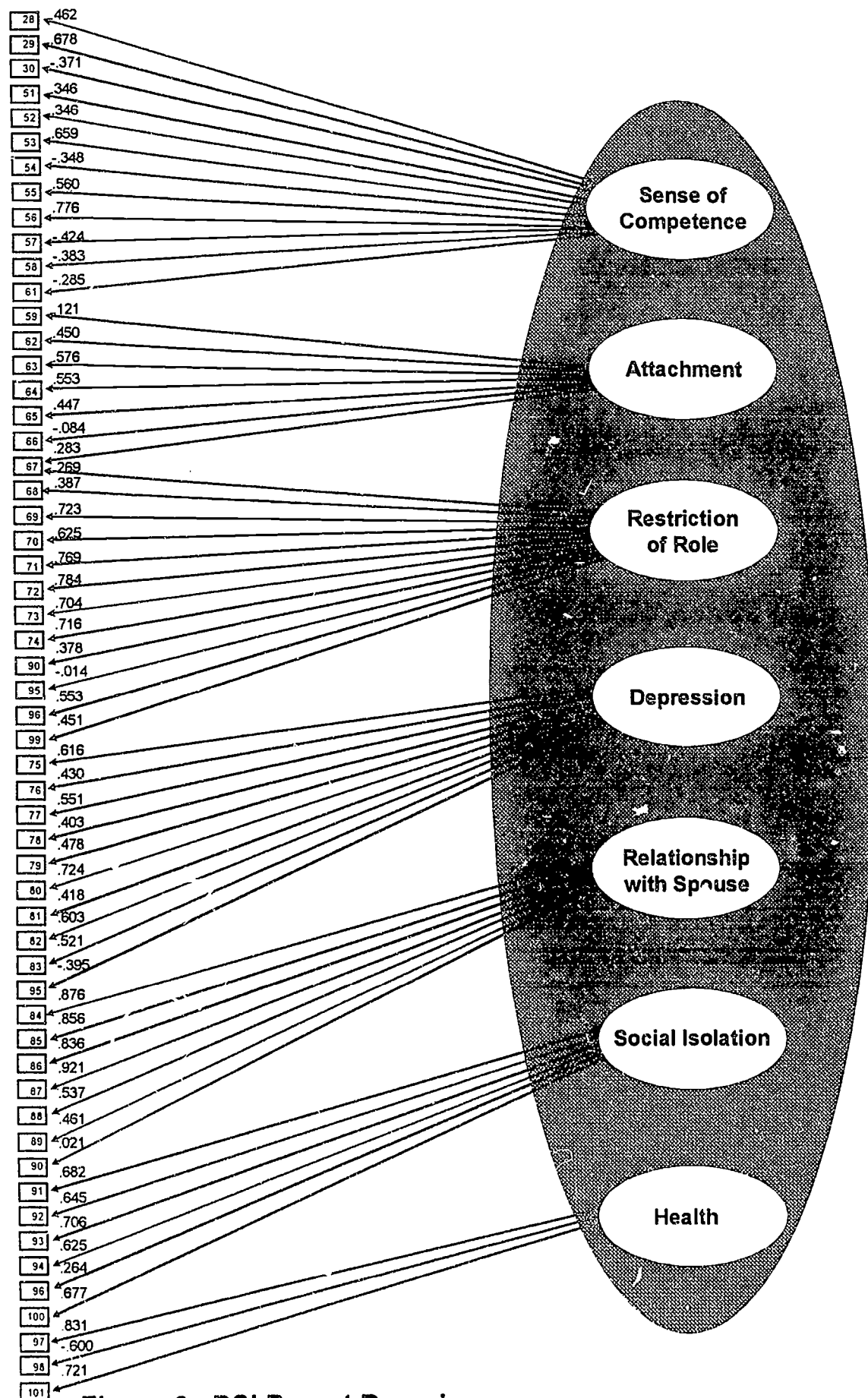


Figure 6. PSI Parent Domain

Note: Dark circle indicates all factors are correlated. The Phi Matrix is presented in Table 72.

Correlations between the parent domain factors are presented in Table 72. The improved model showed a noteworthy, and statistically significant, improvement on all fit indexes. Although the fit statistics for this model suggest some continued misspecification, additional improvement for the model would have required deleting items and/or allowing more error terms to correlate. Thus, it was judged that the increase in model fit would not offset the loss of integrity of a well used instrument.

Table 72
Interrcorrelations Between PSI Factors (Phi Matrix for Parent Scale)

Factor	1	2	3	4	5	6	7
1. Sense of Competence	1.000						
2. Attachment	0.517	1.000					
3. Restriction of Role	0.686	0.328	1.000				
4. Depression	0.832	0.645	0.703	1.000			
5. Relationship w/spouse	0.526	0.283	0.635	0.635	1.000		
6. Social Isolation	0.598	0.440	0.600	0.749	0.607	1.000	
7. Health	0.503	0.167	0.499	0.540	0.465	0.544	1.000

Confirming New Structure and Measuring Invariance

Since exploratory analyses were conducted with the full sample, it was not possible to confirm the new structure with an independent data set. Similarly, conducting invariance analysis was untenable given the limited sample size of the longitudinal data set (e.g., estimating 278 parameters with a sample size of 369).

Internal consistency and test-retest reliability coefficients for the modified scales were calculated and are presented in Tables 73 and 74.

Table 73

Internal Consistency Reliability of PSI Data

PSI Scale	Internal Consistency Coefficient
PSI Scales: Child Domain	
Adaptability	.56
Acceptability	.75
Demandingness	.65
Mood	.57
Distractability/Hyperactivity	.55
Reinforces Parent	.58
PSI Scales: Parent Domain	
Depression	.70
Attachment	.51
Restriction of Role	.77
Sense of Competence	.23
Social Isolation	.81
Relationship with Spouse	.76
Parent Health	-.36

Table 74
Test-Retest Reliability Coefficients for Modified PSI Scales

PSI Scale	Year1-Year2	Year1-Year3	Year2-Year3
PSI Scales: Child Domain			
Adaptability	.48	.43	.60
Acceptability	.64	.63	.75
Demandingness	.58	.51	.58
Mood	.52	.50	.57
Distractability/Hyperactivity	.50	.47	.55
Reinforces Parent	.51	.41	.49
PSI Scales: Parent Domain			
Depression	.53	.47	.55
Attachment	.52	.45	.48
Restriction of Role	.64	.61	.68
Sense of Competence	.40	.35	.48
Social Isolation	.61	.59	.63
Relationship with Spouse	.61	.57	.68
Parent Health	.33	.33	.32

Normative Data

Percentile ranks for the original PSI scales are presented in Tables 75-88. Percentiles were calculated on the full sample of 922 subjects. Because these data are unique in their breadth and diversity, the normative data presented should be used when interpreting scores from a family having a child with a disability.

Table 75

Percentile Ranks for PSI, Child Adaptability Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	22.000	2.00	22.460	3.00	24.000
4.00	25.000	5.00	26.000	6.00	26.380
7.00	27.000	8.00	28.000	9.00	28.000
10.00	29.000	11.00	29.000	12.00	29.000
13.00	29.515	14.00	30.000	15.00	30.000
16.00	30.000	17.00	31.000	18.00	31.000
19.00	31.000	20.00	31.000	21.00	32.000
22.00	32.000	23.00	32.000	24.00	32.000
25.00	32.000	26.00	33.000	27.00	33.000
28.00	33.000	29.00	33.000	30.00	33.000
31.00	33.027	32.00	34.000	33.00	34.000
34.00	34.000	35.00	34.000	36.00	34.000
37.00	34.000	38.00	35.000	39.00	35.000
40.00	35.000	41.00	35.000	42.00	35.000
43.00	35.000	44.00	35.000	45.00	35.000
46.00	36.000	47.00	36.000	48.00	36.000
49.00	36.000	50.00	36.000	51.00	36.000
52.00	36.000	53.00	36.000	54.00	36.000
55.00	36.000	56.00	36.000	57.00	37.000
58.00	37.000	59.00	37.000	60.00	37.000
61.00	37.000	62.00	37.000	63.00	37.000
64.00	37.000	65.00	38.000	66.00	38.000
67.00	38.000	68.00	38.000	69.00	38.000
70.00	38.000	71.00	38.000	72.00	38.000
73.00	39.000	74.00	39.000	75.00	39.000
76.00	39.000	77.00	39.000	78.00	40.000
79.00	40.000	80.00	40.000	81.00	40.000
82.00	40.000	83.00	40.000	84.00	41.000
85.00	41.000	86.00	41.000	87.00	41.000
88.00	42.000	89.00	42.000	90.00	42.000
91.00	43.000	92.00	43.000	93.00	44.000
94.00	44.000	95.00	45.000	96.00	45.000
97.00	46.000	98.00	47.000	99.00	48.000

n = 922

Table 76

Percentile Ranks for PSI, Child Acceptability Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	14.000	2.00	15.000	3.00	17.000
4.00	17.000	5.00	18.000	6.00	19.000
7.00	19.000	8.00	19.000	9.00	20.000
10.00	20.000	11.00	21.000	12.00	21.000
13.00	21.000	14.00	21.000	15.00	21.000
16.00	21.000	17.00	21.910	18.00	22.000
19.00	22.000	20.00	22.000	21.00	22.000
22.00	23.000	23.00	23.000	24.00	23.000
25.00	23.000	26.00	23.000	27.00	23.000
28.00	23.000	29.00	24.000	30.00	24.000
31.00	24.000	32.00	24.000	33.00	24.000
34.00	24.000	35.00	24.000	36.00	24.000
37.00	24.000	38.00	24.000	39.00	25.000
40.00	25.000	41.00	25.000	42.00	25.000
43.00	25.000	44.00	25.000	45.00	25.000
46.00	25.693	47.00	26.000	48.00	26.000
49.00	26.000	50.00	26.000	51.00	26.000
52.00	26.000	53.00	26.000	54.00	26.000
55.00	26.000	56.00	27.000	57.00	27.000
58.00	27.000	59.00	27.000	60.00	27.000
61.00	27.000	62.00	27.000	63.00	27.000
64.00	28.000	65.00	28.000	66.00	28.000
67.00	28.000	68.00	28.000	69.00	28.000
70.00	28.000	71.00	28.000	72.00	29.000
73.00	29.000	74.00	29.000	75.00	29.000
76.00	29.000	77.00	29.000	78.00	29.978
79.00	30.000	80.00	30.000	81.00	30.000
82.00	30.000	83.00	31.000	84.00	31.000
85.00	31.000	86.00	31.000	87.00	31.000
88.00	32.000	89.00	32.000	90.00	32.000
91.00	32.000	92.00	33.000	93.00	33.000
94.00	34.000	95.00	34.000	96.00	34.000
97.00	35.000	98.00	35.000	99.00	35.000

N = 922

Table 77

Percentile Ranks for PSI, Child Demandingness Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	15.885	2.00	17.000	3.00	18.000
4.00	19.000	5.00	19.101	6.00	20.000
7.00	20.000	8.00	21.000	9.00	21.000
10.00	21.000	11.00	21.000	12.00	22.000
13.00	22.000	14.00	22.000	15.00	22.068
16.00	23.000	17.00	23.000	18.00	23.000
19.00	23.000	20.00	23.000	21.00	24.000
22.00	24.000	23.00	24.000	24.00	24.000
25.00	24.000	26.00	24.000	27.00	24.000
28.00	25.000	29.00	25.000	30.00	25.000
31.00	25.000	32.00	25.000	33.00	25.000
34.00	25.000	35.00	26.000	36.00	26.000
37.00	26.000	38.00	26.000	39.00	26.000
40.00	26.000	41.00	26.000	42.00	26.000
43.00	27.000	44.00	27.000	45.00	27.000
46.00	27.000	47.00	27.000	48.00	27.000
49.00	27.000	50.00	27.000	51.00	27.000
52.00	28.000	53.00	28.000	54.00	28.000
55.00	28.000	56.00	28.000	57.00	28.000
58.00	28.000	59.00	29.000	60.00	29.000
61.00	29.000	62.00	29.000	63.00	29.000
64.00	29.000	65.00	29.000	66.00	29.000
67.00	30.000	68.00	30.000	69.00	30.000
70.00	30.000	71.00	30.000	72.00	30.000
73.00	30.000	74.00	30.003	75.00	31.000
76.00	31.000	77.00	31.000	78.00	31.000
79.00	31.000	80.00	31.000	81.00	31.000
82.00	31.597	83.00	32.000	84.00	32.000
85.00	32.000	86.00	32.000	87.00	32.000
88.00	33.000	89.00	33.000	90.00	33.000
91.00	33.000	92.00	34.000	93.00	34.000
94.00	34.000	95.00	35.000	96.00	35.000
97.00	36.000	98.00	37.000	99.00	37.000

N = 922

Table 78

Percentile Ranks for PSI, Child Mood Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	11.000	2.00	12.000	3.00	13.000
4.00	13.000	5.00	13.150	6.00	14.000
7.00	14.000	8.00	15.000	9.00	15.000
10.00	15.000	11.00	15.000	12.00	15.000
13.00	15.000	14.00	16.000	15.00	16.000
16.00	16.000	17.00	16.000	18.00	16.000
19.00	16.000	20.00	16.000	21.00	16.864
22.00	17.000	23.00	17.000	24.00	17.000
25.00	17.000	26.00	17.000	27.00	17.000
28.00	17.000	29.00	17.000	30.00	17.000
31.00	17.000	32.00	17.000	33.00	18.000
34.00	18.000	35.00	18.000	36.00	18.000
37.00	18.000	38.00	18.000	39.00	18.000
40.00	18.000	41.00	18.000	42.00	18.000
43.00	18.000	44.00	18.000	45.00	18.350
46.00	19.000	47.00	19.000	48.00	19.000
49.00	19.000	50.00	19.000	51.00	19.000
52.00	19.000	53.00	19.000	54.00	19.000
55.00	19.000	56.00	19.000	57.00	19.000
58.00	19.000	59.00	19.000	60.00	19.000
61.00	19.000	62.00	19.000	63.00	19.000
64.00	20.000	65.00	20.000	66.00	20.000
67.00	20.000	68.00	20.000	69.00	20.000
70.00	20.000	71.00	20.000	72.00	20.000
73.00	20.000	74.00	20.000	75.00	20.000
76.00	20.000	77.00	20.710	78.00	21.000
79.00	21.000	80.00	21.000	81.00	21.000
82.00	21.000	83.00	21.000	84.00	21.000
85.00	21.000	86.00	21.000	87.00	21.000
88.00	21.000	89.00	22.000	90.00	22.000
91.00	22.000	92.00	22.000	93.00	22.000
94.00	22.000	95.00	22.000	96.00	22.000
97.00	23.000	98.00	23.000	99.00	23.000

N = 922

Table 79

Percentile Ranks for PSI, Child Reinforces Parent Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	13.000	2.00	13.000	3.00	14.000
4.00	14.920	5.00	15.000	6.00	15.000
7.00	16.000	8.00	16.000	9.00	16.000
10.00	16.000	11.00	16.000	12.00	17.000
13.00	17.000	14.00	17.000	15.00	17.000
16.00	17.000	17.00	17.000	18.00	17.000
19.00	17.000	20.00	17.000	21.00	17.000
22.00	18.000	23.00	18.000	24.00	18.000
25.00	18.000	26.00	18.000	27.00	18.000
28.00	18.000	29.00	18.000	30.00	18.000
31.00	18.000	32.00	18.000	33.00	18.000
34.00	18.016	35.00	19.000	36.00	19.000
37.00	19.000	38.00	19.000	39.00	19.000
40.00	19.000	41.00	19.000	42.00	19.000
43.00	19.000	44.00	19.000	45.00	19.000
46.00	19.000	47.00	19.000	48.00	19.000
49.00	19.978	50.00	20.000	51.00	20.000
52.00	20.000	53.00	20.000	54.00	20.000
55.00	20.000	56.00	20.000	57.00	20.000
58.00	20.000	59.00	20.000	60.00	20.000
61.00	20.000	62.00	20.000	63.00	20.000
64.00	20.000	65.00	21.000	66.00	21.000
67.00	21.000	68.00	21.000	69.00	21.000
70.00	21.000	71.00	21.000	72.00	21.000
73.00	21.000	74.00	21.000	75.00	21.000
76.00	21.000	77.00	21.000	78.00	21.000
79.00	21.000	80.00	22.000	81.00	22.000
82.00	22.000	83.00	22.000	84.00	22.000
85.00	22.000	86.00	22.000	87.00	22.000
88.00	22.000	89.00	22.000	90.00	22.000
91.00	22.000	92.00	22.000	93.00	22.000
94.00	22.000	95.00	23.000	96.00	23.000
97.00	23.000	98.00	24.000	99.00	25.000

N = 922

Table 80

Percentile Ranks for PSI, Parent Depression Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	20.000	2.00	21.000	3.00	22.000
4.00	24.000	5.00	24.000	6.00	24.000
7.00	25.000	8.00	26.000	9.00	26.000
10.00	27.000	11.00	27.000	12.00	27.000
13.00	28.000	14.00	28.000	15.00	28.000
16.00	28.981	17.00	29.000	18.00	29.000
19.00	29.000	20.00	30.000	21.00	30.000
22.00	30.000	23.00	30.000	24.00	30.000
25.00	31.000	26.00	31.000	27.00	31.000
28.00	31.000	29.00	31.000	30.00	31.000
31.00	31.000	32.00	32.000	33.00	32.000
34.00	32.000	35.00	32.000	36.00	32.000
37.00	32.000	38.00	33.000	39.00	33.000
40.00	33.000	41.00	33.000	42.00	33.000
43.00	33.000	44.00	34.000	45.00	34.000
46.00	34.000	47.00	34.000	48.00	34.000
49.00	34.000	50.00	34.000	51.00	34.000
52.00	34.000	53.00	35.000	54.00	35.000
55.00	35.000	56.00	35.000	57.00	35.000
58.00	35.000	59.00	35.000	60.00	36.000
61.00	36.000	62.00	36.000	63.00	36.000
64.00	36.000	65.00	36.000	66.00	36.000
67.00	36.000	68.00	36.000	69.00	36.000
70.00	36.000	71.00	36.000	72.00	37.000
73.00	37.000	74.00	37.000	75.00	37.000
76.00	37.000	77.00	37.000	78.00	38.000
79.00	38.000	80.00	38.000	81.00	39.000
82.00	39.000	83.00	39.000	84.00	39.000
85.00	39.000	86.00	40.000	87.00	40.000
88.00	40.000	89.00	41.000	90.00	41.000
91.00	41.930	92.00	42.000	93.00	42.000
94.00	43.000	95.00	43.000	96.00	44.000
97.00	44.000	98.00	45.000	99.00	45.000

N = 922

Table 81

Percentile Ranks for PSI, Parent Attachment Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	16.000	2.00	18.000	3.00	18.690
4.00	19.000	5.00	20.000	6.00	20.000
7.00	20.000	8.00	21.000	9.00	21.000
10.00	21.000	11.00	21.000	12.00	21.000
13.00	21.990	14.00	22.000	15.00	22.000
16.00	22.000	17.00	22.000	18.00	22.000
19.00	22.000	20.00	23.000	21.00	23.000
22.00	23.000	23.00	23.000	24.00	23.000
25.00	23.000	26.00	23.000	27.00	23.000
28.00	23.000	29.00	23.000	30.00	23.000
31.00	24.000	32.00	24.000	33.00	24.000
34.00	24.000	35.00	24.000	36.00	24.000
37.00	24.000	38.00	24.000	39.00	24.000
40.00	24.000	41.00	24.000	42.00	24.000
43.00	24.000	44.00	24.173	45.00	25.000
46.00	25.000	47.00	25.000	48.00	25.000
49.00	25.000	50.00	25.000	51.00	25.000
52.00	25.000	53.00	25.000	54.00	25.000
55.00	25.000	56.00	25.862	57.00	26.000
58.00	26.000	59.00	26.000	60.00	26.000
61.00	26.000	62.00	26.000	63.00	26.000
64.00	26.000	65.00	26.000	66.00	26.000
67.00	26.000	68.00	26.000	69.00	27.000
70.00	27.000	71.00	27.000	72.00	27.000
73.00	27.000	74.00	27.000	75.00	27.000
76.00	27.000	77.00	27.000	78.00	27.000
79.00	27.000	80.00	27.000	81.00	27.000
82.00	28.000	83.00	28.000	84.00	28.000
85.00	28.000	86.00	28.000	87.00	28.000
88.00	28.000	89.00	28.000	90.00	29.000
91.00	29.000	92.00	29.000	93.00	29.000
94.00	29.000	95.00	30.000	96.00	30.000
97.00	30.000	98.00	30.000	99.00	31.000

N = 922

Table 82

Percentile Ranks for PSI, Parent Restriction of Role Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	9.230	2.00	11.000	3.00	12.000
4.00	13.000	5.00	13.000	6.00	14.000
7.00	14.000	8.00	14.000	9.00	15.000
10.00	16.000	11.00	16.000	12.00	16.000
13.00	17.000	14.00	17.000	15.00	17.000
16.00	18.000	17.00	18.000	18.00	18.000
19.00	18.000	20.00	18.000	21.00	18.000
22.00	19.000	23.00	19.000	24.00	19.520
25.00	20.000	26.00	20.000	27.00	20.000
28.00	20.000	29.00	20.000	30.00	20.000
31.00	21.000	32.00	21.000	33.00	21.000
34.00	21.000	35.00	21.000	36.00	21.280
37.00	22.000	38.00	22.000	39.00	22.000
40.00	22.000	41.00	22.000	42.00	22.000
43.00	22.000	44.00	22.000	45.00	23.000
46.00	23.000	47.00	23.000	48.00	23.000
49.00	23.000	50.00	23.500	51.00	24.000
52.00	24.000	53.00	24.000	54.00	24.000
55.00	24.000	56.00	24.000	57.00	24.000
58.00	24.000	59.00	24.570	60.00	25.000
61.00	25.000	62.00	25.000	63.00	25.000
64.00	25.000	65.00	25.000	66.00	25.180
67.00	26.000	68.00	26.000	69.00	26.000
70.00	26.000	71.00	26.000	72.00	26.000
73.00	26.000	74.00	26.000	75.00	26.000
76.00	27.000	77.00	27.000	78.00	27.000
79.00	27.000	80.00	27.000	81.00	28.000
82.00	28.000	83.00	28.000	84.00	28.000
85.00	28.000	86.00	28.000	87.00	28.000
88.00	29.000	89.00	29.000	90.00	29.000
91.00	30.000	92.00	30.000	93.00	31.000
94.00	31.000	95.00	31.000	96.00	31.080
97.00	32.000	98.00	33.000	99.00	34.000

N = 922

Table 83

Percentile Ranks for PSI, Parent Sense of Competence Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	26.900	2.00	27.460	3.00	29.000
4.00	29.000	5.00	30.000	6.00	31.000
7.00	31.000	8.00	32.000	9.00	32.000
10.00	33.000	11.00	33.000	12.00	33.000
13.00	33.000	14.00	33.200	15.00	34.000
16.00	34.000	17.00	34.000	18.00	34.000
19.00	34.000	20.00	35.000	21.00	35.000
22.00	35.000	23.00	35.000	24.00	35.000
25.00	35.000	26.00	35.000	27.00	36.000
28.00	36.000	29.00	36.000	30.00	36.000
31.00	36.000	32.00	36.000	33.00	36.000
34.00	36.000	35.00	36.000	36.00	37.000
37.00	37.000	38.00	37.000	39.00	37.000
40.00	37.000	41.00	37.000	42.00	37.000
43.00	37.000	44.00	37.000	45.00	37.000
46.00	37.000	47.00	37.000	48.00	38.000
49.00	38.000	50.00	38.000	51.00	38.000
52.00	38.000	53.00	38.000	54.00	38.000
55.00	38.000	56.00	38.000	57.00	39.000
58.00	39.000	59.00	39.000	60.00	39.000
61.00	39.000	62.00	39.000	63.00	39.000
64.00	39.000	65.00	39.000	66.00	39.000
67.00	39.000	68.00	39.000	69.00	40.000
70.00	40.000	71.00	40.000	72.00	40.000
73.00	40.000	74.00	40.000	75.00	40.000
76.00	40.766	77.00	41.000	78.00	41.000
79.00	41.000	80.00	41.000	81.00	41.000
82.00	41.000	83.00	41.000	84.00	42.000
85.00	42.000	86.00	42.000	87.00	42.000
88.00	42.000	89.00	42.000	90.00	43.000
91.00	43.000	92.00	43.000	93.00	43.000
94.00	44.000	95.00	44.000	96.00	45.000
97.00	45.000	98.00	46.000	99.00	47.000

N = 922

Table 84

Percentile Ranks for PSI, Parent Social Isolation Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	11.230	2.00	13.000	3.00	13.690
4.00	14.000	5.00	15.000	6.00	15.000
7.00	16.000	8.00	16.000	9.00	16.070
10.00	17.000	11.00	17.000	12.00	17.000
13.00	17.000	14.00	17.000	15.00	17.000
16.00	18.000	17.00	18.000	18.00	18.070
19.00	18.000	20.00	18.000	21.00	18.000
22.00	18.000	23.00	19.000	24.00	19.000
25.00	19.000	26.00	19.000	27.00	19.000
28.00	19.000	29.00	19.000	30.00	19.995
31.00	20.000	32.00	20.000	33.00	20.000
34.00	20.000	35.00	20.000	36.00	20.000
37.00	20.000	38.00	20.000	39.00	20.000
40.00	20.000	41.00	20.000	42.00	20.000
43.00	20.000	44.00	21.000	45.00	21.000
46.00	21.000	47.00	21.000	48.00	21.000
49.00	21.000	50.00	21.000	51.00	21.000
52.00	21.000	53.00	21.000	54.00	22.000
55.00	22.000	56.00	22.000	57.00	22.000
58.00	22.000	59.00	22.000	60.00	22.000
61.00	22.000	62.00	22.000	63.00	22.000
64.00	22.000	65.00	22.000	66.00	22.000
67.00	22.000	68.00	22.000	69.00	22.000
70.00	22.000	71.00	23.000	72.00	23.000
73.00	23.000	74.00	23.000	75.00	23.000
76.00	23.000	77.00	23.000	78.00	23.000
79.00	24.000	80.00	24.000	81.00	24.000
82.00	24.000	83.00	24.000	84.00	24.000
85.00	24.000	86.00	25.000	87.00	25.000
88.00	25.000	89.00	25.000	90.00	25.000
91.00	25.000	92.00	26.000	93.00	26.000
94.00	26.000	95.00	26.000	96.00	26.000
97.00	27.000	98.00	27.000	99.00	28.770

N = 922

Table 85

Percentile Ranks for PSI, Parent Relationship with Spouse Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	10.000	2.00	11.000	3.00	12.000
4.00	13.000	5.00	14.000	6.00	14.380
7.00	15.000	8.00	15.000	9.00	16.000
10.00	16.000	11.00	16.000	12.00	17.000
13.00	17.000	14.00	17.000	15.00	18.000
16.00	18.000	17.00	19.000	18.00	19.000
19.00	19.000	20.00	19.000	21.00	20.000
22.00	20.000	23.00	20.000	24.00	20.000
25.00	20.000	26.00	20.000	27.00	21.000
28.00	21.000	29.00	21.000	30.00	21.000
31.00	21.000	32.00	22.000	33.00	22.000
34.00	22.000	35.00	22.000	36.00	22.000
37.00	22.000	38.00	22.000	39.00	23.000
40.00	23.000	41.00	23.000	42.00	23.000
43.00	23.000	44.00	23.000	45.00	24.000
46.00	24.000	47.00	24.000	48.00	24.000
49.00	24.000	50.00	24.000	51.00	24.000
52.00	24.000	53.00	24.000	54.00	24.000
55.00	25.000	56.00	25.000	57.00	25.000
58.00	25.000	59.00	25.794	60.00	26.000
61.00	26.000	62.00	26.000	63.00	26.000
64.00	26.000	65.00	26.000	66.00	26.000
67.00	26.000	68.00	26.000	69.00	27.000
70.00	27.000	71.00	27.000	72.00	27.000
73.00	27.000	74.00	27.000	75.00	27.130
76.00	28.000	77.00	28.000	78.00	28.000
79.00	28.000	80.00	28.000	81.00	28.000
82.00	28.000	83.00	29.000	84.00	29.000
85.00	29.000	86.00	29.000	87.00	30.000
88.00	30.000	89.00	30.000	90.00	31.000
91.00	31.000	92.00	31.000	93.00	32.000
94.00	32.000	95.00	32.000	96.00	32.080
97.00	33.000	98.00	34.000	99.00	35.000

N = 922

Table 86

Percentile Ranks for PSI, Parent Health Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	9.000	2.00	10.000	3.00	10.000
4.00	10.000	5.00	11.000	6.00	11.000
7.00	11.000	8.00	11.000	9.00	11.000
10.00	12.000	11.00	12.000	12.00	12.000
13.00	12.000	14.00	12.000	15.00	13.000
16.00	13.000	17.00	13.000	18.00	13.000
19.00	13.000	20.00	13.000	21.00	14.000
22.00	14.000	23.00	14.000	24.00	14.000
25.00	14.000	26.00	14.000	27.00	14.000
28.00	14.000	29.00	14.000	30.00	14.000
31.00	15.000	32.00	15.000	33.00	15.000
34.00	15.000	35.00	15.000	36.00	15.000
37.00	15.000	38.00	15.000	39.00	15.000
40.00	15.640	41.00	16.000	42.00	16.000
43.00	16.000	44.00	16.000	45.00	16.000
46.00	16.000	47.00	16.000	48.00	16.000
49.00	16.000	50.00	16.000	51.00	16.000
52.00	16.000	53.00	16.000	54.00	16.000
55.00	16.000	56.00	16.000	57.00	16.000
58.00	16.000	59.00	16.000	60.00	17.000
61.00	17.000	62.00	17.000	63.00	17.000
64.00	17.000	65.00	17.000	66.00	17.000
67.00	17.000	68.00	17.000	69.00	17.000
70.00	17.000	71.00	17.699	72.00	18.000
73.00	18.000	74.00	18.000	75.00	18.000
76.00	18.000	77.00	18.000	78.00	18.000
79.00	18.000	80.00	18.000	81.00	18.000
82.00	18.000	83.00	18.000	84.00	18.000
85.00	18.000	86.00	18.000	87.00	19.000
88.00	19.000	89.00	19.000	90.00	19.000
91.00	19.000	92.00	19.000	93.00	20.000
94.00	20.000	95.00	20.000	96.00	20.000
97.00	20.000	98.00	21.000	99.00	21.000

N = 922

Table 87

Percentile Ranks for PSI Total Stress Score

Percentile	Value	Percentile	Value	Percentile	Value
1.00	253.230	2.00	259.000	3.00	266.000
4.00	271.000	5.00	275.000	6.00	278.380
7.00	282.000	8.00	286.000	9.00	289.000
10.00	291.000	11.00	292.000	12.00	294.000
13.00	295.000	14.00	297.000	15.00	298.248
16.00	301.000	17.00	303.000	18.00	305.000
19.00	306.000	20.00	306.600	21.00	307.506
22.00	308.000	23.00	309.000	24.00	310.000
25.00	311.000	26.00	311.398	27.00	312.017
28.00	314.927	29.00	316.000	30.00	317.000
31.00	317.033	32.00	318.198	33.00	320.000
34.00	321.221	35.00	323.000	36.00	323.000
37.00	324.000	38.00	325.000	39.00	325.000
40.00	326.000	41.00	327.000	42.00	327.000
43.00	328.000	44.00	329.000	45.00	330.000
46.00	331.000	47.00	331.000	48.00	332.000
49.00	333.000	50.00	333.000	51.00	334.000
52.00	335.000	53.00	335.927	54.00	336.559
55.00	337.000	56.00	338.000	57.00	339.000
58.00	339.000	59.00	340.000	60.00	341.000
61.00	342.000	62.00	343.000	63.00	344.000
64.00	346.000	65.00	346.000	66.00	347.000
67.00	348.000	68.00	349.000	69.00	350.000
70.00	350.000	71.00	351.000	72.00	352.073
73.00	353.000	74.00	354.013	75.00	355.752
76.00	356.000	77.00	357.000	78.00	358.000
79.00	360.000	80.00	361.000	81.00	362.000
82.00	363.000	83.00	364.918	84.00	365.000
85.00	367.000	86.00	369.406	87.00	371.000
88.00	372.000	89.00	374.952	90.00	377.000
91.00	379.000	92.00	381.000	93.00	383.000
94.00	387.620	95.00	392.000	96.00	394.000
97.00	398.000	98.00	403.540	99.00	413.770

N = 922

Table 88

**Descriptive Statistics for PSI Child Domain Scales, Parent Domain Scales,
and Total Stress Score**

Variable	Mean	Std. Dev.
Child Domain Scales		
Adaptability	35.61	5.49
Acceptability	25.92	4.68
Demandingness	27.28	4.67
Mood	18.45	2.66
Reinforces Parent	19.37	2.53
Parent Domain Scales		
Depression	33.87	5.51
Attachment	24.86	3.06
Restriction of Role	22.90	5.32
Sense of Competence	37.67	4.14
Social Isolation	20.91	3.49
Relationship with Spouse	23.70	5.46
Health	15.72	2.79
PSI Total Stress	333.34	34.15

Percentile ranks and descriptive statistics were also computed for the modified PSI scales (see Tables 89 - 102). These data should be used to interpret PSI scores when the modified scoring system is used.

Table 89

Percentile Ranks for Modified PSI, Child Distractibility/Hyperactivity Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	15.000	2.00	16.000	3.00	17.000
4.00	17.920	5.00	18.000	6.00	19.000
7.00	19.000	8.00	19.000	9.00	20.000
10.00	20.000	11.00	21.000	12.00	21.000
13.00	21.000	14.00	21.000	15.00	22.000
16.00	22.000	17.00	22.000	18.00	22.000
19.00	23.000	20.00	23.000	21.00	23.000
22.00	23.000	23.00	24.000	24.00	24.000
25.00	24.000	26.00	24.000	27.00	24.000
28.00	24.000	29.00	24.000	30.00	24.270
31.00	25.000	32.00	25.000	33.00	25.000
34.00	25.000	35.00	25.000	36.00	25.000
37.00	26.000	38.00	26.000	39.00	26.000
40.00	26.000	41.00	26.000	42.00	26.000
43.00	26.000	44.00	26.000	45.00	27.000
46.00	27.000	47.00	27.000	48.00	27.000
49.00	27.000	50.00	27.000	51.00	27.000
52.00	27.958	53.00	28.000	54.00	28.000
55.00	28.000	56.00	28.000	57.00	28.000
58.00	28.000	59.00	28.000	60.00	28.000
61.00	29.000	62.00	29.000	63.00	29.000
64.00	29.000	65.00	29.000	66.00	29.000
67.00	29.000	68.00	30.000	69.00	30.000
70.00	30.000	71.00	30.000	72.00	30.000
73.00	30.000	74.00	30.000	75.00	31.000
76.00	31.000	77.00	31.000	78.00	31.000
79.00	31.000	80.00	31.000	81.00	31.000
82.00	32.000	83.00	32.000	84.00	32.000
85.00	32.000	86.00	32.000	87.00	32.000
88.00	33.000	89.00	33.000	90.00	33.000
91.00	34.000	92.00	34.000	93.00	34.000
94.00	34.620	95.00	35.000	96.00	36.000
97.00	37.000	98.00	39.000	99.00	41.000

n = 922

Table 90

Percentile Ranks for Modified PSI, Child Reinforces Parent Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	20.000	2.00	22.000	3.00	23.000
4.00	24.000	5.00	24.000	6.00	25.000
7.00	26.000	8.00	26.000	9.00	27.000
10.00	27.000	11.00	27.000	12.00	27.000
13.00	28.000	14.00	28.000	15.00	28.000
16.00	28.000	17.00	29.000	18.00	29.000
19.00	29.000	20.00	29.000	21.00	29.000
22.00	29.000	23.00	29.000	24.00	30.000
25.00	30.000	26.00	30.000	27.00	30.000
28.00	30.000	29.00	30.000	30.00	30.000
31.00	31.000	32.00	31.000	33.00	31.000
34.00	31.000	35.00	31.000	36.00	31.000
37.00	31.000	38.00	31.000	39.00	31.000
40.00	31.000	41.00	32.000	42.00	32.000
43.00	32.000	44.00	32.000	45.00	32.000
46.00	32.000	47.00	32.000	48.00	32.000
49.00	32.000	50.00	32.000	51.00	32.000
52.00	32.960	53.00	33.000	54.00	33.000
55.00	33.000	56.00	33.000	57.00	33.000
58.00	33.000	59.00	33.000	60.00	33.000
61.00	33.000	62.00	33.000	63.00	34.000
64.00	34.000	65.00	34.000	66.00	34.000
67.00	34.000	68.00	34.000	69.00	34.000
70.00	34.000	71.00	34.000	72.00	35.000
73.00	35.000	74.00	35.000	75.00	35.000
76.00	35.000	77.00	35.000	78.00	35.000
79.00	35.000	80.00	36.000	81.00	36.000
82.00	36.000	83.00	36.000	84.00	36.000
85.00	36.000	86.00	36.000	87.00	36.000
88.00	37.000	89.00	37.000	90.00	37.000
91.00	37.000	92.00	37.000	93.00	37.000
94.00	37.000	95.00	37.000	96.00	37.000
97.00	37.000	98.00	38.000	99.00	39.770

n = 922

Table 91

Percentile Ranks for Modified PSI, Child Adaptability Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	22.000	2.00	23.000	3.00	24.690
4.00	25.000	5.00	26.000	6.00	26.270
7.00	27.000	8.00	28.000	9.00	28.000
10.00	28.000	11.00	28.972	12.00	29.000
13.00	29.000	14.00	29.000	15.00	29.736
16.00	30.000	17.00	30.000	18.00	30.000
19.00	31.000	20.00	31.000	21.00	31.000
22.00	31.000	23.00	32.000	24.00	32.000
25.00	32.000	26.00	32.000	27.00	32.000
28.00	32.000	29.00	33.000	30.00	33.000
31.00	33.000	32.00	33.000	33.00	33.000
34.00	33.000	35.00	33.000	36.00	33.000
37.00	33.000	38.00	34.000	39.00	34.000
40.00	34.000	41.00	34.000	42.00	34.000
43.00	34.000	44.00	34.000	45.00	34.000
46.00	35.000	47.00	35.000	48.00	35.000
49.00	35.000	50.00	35.000	51.00	35.000
52.00	35.000	53.00	35.000	54.00	35.000
55.00	35.000	56.00	36.000	57.00	36.000
58.00	36.000	59.00	36.000	60.00	36.000
61.00	36.000	62.00	36.000	63.00	36.000
64.00	36.000	65.00	37.000	66.00	37.000
67.00	37.000	68.00	37.000	69.00	37.000
70.00	37.000	71.00	37.000	72.00	38.000
73.00	38.000	74.00	38.000	75.00	38.000
76.00	38.000	77.00	38.000	78.00	38.000
79.00	39.000	80.00	39.000	81.00	39.000
82.00	39.000	83.00	39.000	84.00	39.000
85.00	40.000	86.00	40.000	87.00	40.000
88.00	41.000	89.00	41.000	90.00	41.000
91.00	41.000	92.00	42.000	93.00	42.000
94.00	43.000	95.00	43.000	96.00	44.000
97.00	44.000	98.00	45.000	99.00	46.000

n = 922

Table 92

Percentile Ranks for Modified PSI, Child Acceptability Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	10.230	2.00	12.460	3.00	13.895
4.00	14.000	5.00	15.000	6.00	15.000
7.00	16.000	8.00	16.000	9.00	17.000
10.00	17.000	11.00	17.000	12.00	17.000
13.00	17.000	14.00	18.000	15.00	18.000
16.00	18.000	17.00	19.000	18.00	19.000
19.00	19.000	20.00	19.000	21.00	19.000
22.00	19.000	23.00	20.000	24.00	20.000
25.00	20.000	26.00	20.000	27.00	20.000
28.00	20.000	29.00	20.000	30.00	21.000
31.00	21.000	32.00	21.000	33.00	21.000
34.00	21.000	35.00	21.000	36.00	21.000
37.00	22.000	38.00	22.000	39.00	22.000
40.00	22.000	41.00	22.000	42.00	22.000
43.00	22.000	44.00	23.000	45.00	23.000
46.00	23.000	47.00	23.000	48.00	23.000
49.00	23.000	50.00	23.000	51.00	24.000
52.00	24.000	53.00	24.000	54.00	24.000
55.00	24.000	56.00	24.000	57.00	24.000
58.00	24.000	59.00	25.000	60.00	25.000
61.00	25.000	62.00	25.000	63.00	25.000
64.00	25.654	65.00	26.000	66.00	26.000
67.00	26.000	68.00	26.000	69.00	26.000
70.00	26.000	71.00	27.000	72.00	27.000
73.00	27.000	74.00	27.000	75.00	27.000
76.00	27.000	77.00	27.000	78.00	28.000
79.00	28.000	80.00	28.000	81.00	28.000
82.00	28.000	83.00	28.000	84.00	29.000
85.00	29.000	86.00	29.000	87.00	29.000
88.00	29.000	89.00	30.000	90.00	30.000
91.00	30.000	92.00	30.000	93.00	31.000
94.00	31.000	95.00	32.000	96.00	32.000
97.00	33.000	98.00	33.000	99.00	34.000

n = 922

Table 93

Percentile Ranks for Modified PSI, Child Demandingness Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	16.000	2.00	17.000	3.00	18.000
4.00	19.000	5.00	20.000	6.00	20.000
7.00	20.000	8.00	20.947	9.00	21.000
10.00	22.000	11.00	22.000	12.00	22.964
13.00	23.000	14.00	23.000	15.00	23.000
16.00	23.000	17.00	24.000	18.00	24.000
19.00	24.000	20.00	24.000	21.00	24.000
22.00	25.000	23.00	25.000	24.00	25.000
25.00	25.000	26.00	25.000	27.00	26.000
28.00	26.000	29.00	26.000	30.00	26.000
31.00	26.000	32.00	26.000	33.00	27.000
34.00	27.000	35.00	27.000	36.00	27.000
37.00	27.000	38.00	27.000	39.00	27.000
40.00	28.000	41.00	28.000	42.00	28.000
43.00	28.000	44.00	28.000	45.00	28.000
46.00	28.000	47.00	29.000	48.00	29.000
49.00	29.000	50.00	29.000	51.00	29.000
52.00	29.000	53.00	29.000	54.00	29.000
55.00	29.000	56.00	30.000	57.00	30.000
58.00	30.000	59.00	30.000	60.00	30.000
61.00	30.000	62.00	31.000	63.00	31.000
64.00	31.000	65.00	31.000	66.00	31.000
67.00	31.000	68.00	31.000	69.00	31.970
70.00	32.000	71.00	32.000	72.00	32.000
73.00	32.000	74.00	32.000	75.00	32.150
76.00	33.000	77.00	33.000	78.00	33.000
79.00	33.000	80.00	34.000	81.00	34.000
82.00	34.000	83.00	34.000	84.00	34.000
85.00	34.000	86.00	35.000	87.00	35.000
88.00	35.000	89.00	35.000	90.00	35.000
91.00	35.930	92.00	36.000	93.00	36.000
94.00	37.000	95.00	37.000	96.00	38.000
97.00	39.000	98.00	40.000	99.00	40.924

n = 922

Table 94

Percentile Ranks for Modified PSI, Child Mood Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	17.000	2.00	20.000	3.00	20.000
4.00	21.000	5.00	21.000	6.00	22.000
7.00	22.000	8.00	22.000	9.00	23.000
10.00	23.000	11.00	24.000	12.00	24.000
13.00	24.000	14.00	24.000	15.00	24.000
16.00	24.347	17.00	25.000	18.00	25.000
19.00	25.000	20.00	25.000	21.00	26.000
22.00	26.000	23.00	26.000	24.00	26.000
25.00	26.000	26.00	26.000	27.00	27.000
28.00	27.000	29.00	27.000	30.00	27.000
31.00	27.000	32.00	27.000	33.00	27.000
34.00	27.000	35.00	27.000	36.00	28.000
37.00	28.000	38.00	28.000	39.00	28.000
40.00	28.000	41.00	28.000	42.00	28.000
43.00	28.000	44.00	28.000	45.00	29.000
46.00	29.000	47.00	29.000	48.00	29.000
49.00	29.000	50.00	29.000	51.00	29.000
52.00	29.000	53.00	29.000	54.00	29.000
55.00	29.000	56.00	29.000	57.00	30.000
58.00	30.000	59.00	30.000	60.00	30.000
61.00	30.000	62.00	30.000	63.00	30.000
64.00	30.000	65.00	30.000	66.00	31.000
67.00	31.000	68.00	31.000	69.00	31.000
70.00	31.000	71.00	31.000	72.00	31.000
73.00	31.000	74.00	31.000	75.00	32.000
76.00	32.000	77.00	32.000	78.00	32.000
79.00	32.000	80.00	32.000	81.00	32.000
82.00	33.000	83.00	33.000	84.00	33.000
85.00	33.000	86.00	33.000	87.00	33.000
88.00	34.000	89.00	34.000	90.00	34.000
91.00	34.000	92.00	34.000	93.00	35.000
94.00	35.000	95.00	35.000	96.00	36.000
97.00	36.000	98.00	37.000	99.00	37.000

n = 922

Table 95

Percentile Ranks for Modified PSI, Parent Health Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	5.000	2.00	5.000	3.00	6.000
4.00	6.000	5.00	6.000	6.00	6.000
7.00	6.000	8.00	6.928	9.00	7.000
10.00	7.000	11.00	7.000	12.00	7.000
13.00	7.000	14.00	7.000	15.00	7.000
16.00	8.000	17.00	8.000	18.00	8.000
19.00	8.000	20.00	8.000	21.00	8.000
22.00	8.000	23.00	8.000	24.00	8.000
25.00	8.000	26.00	8.000	27.00	8.000
28.00	8.000	29.00	9.000	30.00	9.000
31.00	9.000	32.00	9.000	33.00	9.000
34.00	9.000	35.00	9.000	36.00	9.000
37.00	9.000	38.00	9.000	39.00	9.000
40.00	9.000	41.00	10.000	42.00	10.000
43.00	10.000	44.00	10.000	45.00	10.000
46.00	10.000	47.00	10.000	48.00	10.000
49.00	10.000	50.00	10.000	51.00	10.000
52.00	10.000	53.00	10.000	54.00	10.000
55.00	10.000	56.00	10.000	57.00	10.000
58.00	10.000	59.00	10.000	60.00	10.000
61.00	10.000	62.00	10.000	63.00	10.000
64.00	10.000	65.00	10.000	66.00	10.000
67.00	10.000	68.00	10.000	69.00	10.000
70.00	10.000	71.00	10.000	72.00	10.000
73.00	10.000	74.00	10.000	75.00	10.000
76.00	10.000	77.00	10.000	78.00	10.000
79.00	10.000	80.00	10.000	81.00	10.000
82.00	10.000	83.00	10.000	84.00	11.000
85.00	11.000	86.00	11.000	87.00	11.000
88.00	11.000	89.00	11.000	90.00	11.000
91.00	11.000	92.00	11.000	93.00	11.000
94.00	11.000	95.00	11.000	96.00	12.000
97.00	12.000	98.00	12.000	99.00	13.000

n = 922

Table 96

Percentile Ranks for Modified PSI, Parent Relationship with Spouse Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	10.000	2.00	11.000	3.00	12.000
4.00	13.000	5.00	14.000	6.00	14.380
7.00	15.000	8.00	15.000	9.00	16.000
10.00	16.000	11.00	16.000	12.00	17.000
13.00	17.000	14.00	17.000	15.00	18.000
16.00	18.000	17.00	19.000	18.00	19.000
19.00	19.000	20.00	19.000	21.00	20.000
22.00	20.000	23.00	20.000	24.00	20.000
25.00	20.000	26.00	20.000	27.00	21.000
28.00	21.000	29.00	21.000	30.00	21.000
31.00	21.000	32.00	22.000	33.00	22.000
34.00	22.000	35.00	22.000	36.00	22.000
37.00	22.000	38.00	22.000	39.00	23.000
40.00	23.000	41.00	23.000	42.00	23.000
43.00	23.000	44.00	23.000	45.00	24.000
46.00	24.000	47.00	24.000	48.00	24.000
49.00	24.000	50.00	24.000	51.00	24.000
52.00	24.000	53.00	24.000	54.00	24.000
55.00	25.000	56.00	25.000	57.00	25.000
58.00	25.000	59.00	25.794	60.00	26.000
61.00	26.000	62.00	26.000	63.00	26.000
64.00	26.000	65.00	26.000	66.00	26.000
67.00	26.000	68.00	26.000	69.00	27.000
70.00	27.000	71.00	27.000	72.00	27.000
73.00	27.000	74.00	27.000	75.00	27.130
76.00	28.000	77.00	28.000	78.00	28.000
79.00	28.000	80.00	28.000	81.00	28.000
82.00	28.000	83.00	29.000	84.00	29.000
85.00	29.000	86.00	29.000	87.00	30.000
88.00	30.000	89.00	30.000	90.00	31.000
91.00	31.000	92.00	31.000	93.00	32.000
94.00	32.000	95.00	32.000	96.00	32.080
97.00	33.000	98.00	34.000	99.00	35.000

n = 922

Table 97

Percentile Ranks for Modified PSI, Parent Social Isolation Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	10.230	2.00	12.000	3.00	12.690
4.00	14.000	5.00	14.000	6.00	15.000
7.00	15.000	8.00	16.000	9.00	16.000
10.00	16.000	11.00	17.000	12.00	17.000
13.00	18.000	14.00	18.000	15.00	18.000
16.00	18.000	17.00	18.000	18.00	19.000
19.00	19.000	20.00	19.000	21.00	19.000
22.00	19.000	23.00	20.000	24.00	20.000
25.00	20.000	26.00	20.000	27.00	20.000
28.00	20.000	29.00	20.000	30.00	20.000
31.00	21.000	32.00	21.000	33.00	21.000
34.00	21.000	35.00	21.000	36.00	21.000
37.00	22.000	38.00	22.000	39.00	22.000
40.00	22.000	41.00	22.000	42.00	22.000
43.00	22.000	44.00	22.000	45.00	22.000
46.00	22.000	47.00	22.000	48.00	22.000
49.00	22.019	50.00	23.000	51.00	23.000
52.00	23.000	53.00	23.000	54.00	23.000
55.00	23.000	56.00	23.000	57.00	24.000
58.00	24.000	59.00	24.000	60.00	24.000
61.00	24.000	62.00	24.000	63.00	24.000
64.00	24.000	65.00	24.000	66.00	24.000
67.00	24.000	68.00	24.000	69.00	24.000
70.00	24.000	71.00	24.000	72.00	24.000
73.00	24.790	74.00	25.000	75.00	25.000
76.00	25.000	77.00	25.000	78.00	25.000
79.00	26.000	80.00	26.000	81.00	26.000
82.00	26.000	83.00	27.000	84.00	27.000
85.00	27.000	86.00	27.000	87.00	27.000
88.00	28.000	89.00	28.000	90.00	28.000
91.00	28.000	92.00	29.000	93.00	29.000
94.00	29.000	95.00	29.000	96.00	30.000
97.00	30.000	98.00	30.000	99.00	30.000

n = 922

Table 98

Percentile Ranks for Modified PSI, Parent Sense of Competence Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	23.000	2.00	25.000	3.00	26.000
4.00	26.000	5.00	27.000	6.00	28.000
7.00	28.000	8.00	28.000	9.00	29.000
10.00	29.000	11.00	29.000	12.00	30.000
13.00	30.000	14.00	30.000	15.00	30.000
16.00	30.000	17.00	31.000	18.00	31.000
19.00	31.000	20.00	31.000	21.00	31.000
22.00	31.000	23.00	31.000	24.00	32.000
25.00	32.000	26.00	32.000	27.00	32.000
28.00	32.000	29.00	32.000	30.00	32.000
31.00	33.000	32.00	33.000	33.00	33.000
34.00	33.000	35.00	33.000	36.00	33.000
37.00	33.000	38.00	33.000	39.00	33.000
40.00	33.182	41.00	34.000	42.00	34.000
43.00	34.000	44.00	34.000	45.00	34.000
46.00	34.000	47.00	34.000	48.00	34.000
49.00	34.000	50.00	34.000	51.00	34.000
52.00	34.879	53.00	35.000	54.00	35.000
55.00	35.000	56.00	35.000	57.00	35.000
58.00	35.000	59.00	35.000	60.00	35.000
61.00	35.000	62.00	35.000	63.00	35.490
64.00	36.000	65.00	36.000	66.00	36.000
67.00	36.000	68.00	36.000	69.00	36.000
70.00	36.000	71.00	36.000	72.00	36.000
73.00	36.000	74.00	36.000	75.00	36.000
76.00	37.000	77.00	37.000	78.00	37.000
79.00	37.000	80.00	37.000	81.00	37.000
82.00	37.000	83.00	37.000	84.00	37.000
85.00	38.000	86.00	38.000	87.00	38.000
88.00	38.000	89.00	38.000	90.00	38.000
91.00	39.000	92.00	39.000	93.00	39.000
94.00	40.000	95.00	40.000	96.00	40.000
97.00	41.000	98.00	42.000	99.00	43.000

n = 922

Table 99

Percentile Ranks for Modified PSI, Parent Attachment Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	16.000	2.00	17.989	3.00	19.000
4.00	20.000	5.00	20.000	6.00	20.000
7.00	21.000	8.00	21.000	9.00	21.000
10.00	21.000	11.00	22.000	12.00	22.000
13.00	22.000	14.00	22.000	15.00	22.000
16.00	22.000	17.00	23.000	18.00	23.000
19.00	23.000	20.00	23.000	21.00	23.000
22.00	23.000	23.00	23.000	24.00	23.990
25.00	24.000	26.00	24.000	27.00	24.000
28.00	24.000	29.00	24.000	30.00	24.000
31.00	24.000	32.00	24.000	33.00	24.000
34.00	24.000	35.00	24.000	36.00	24.000
37.00	25.000	38.00	25.000	39.00	25.000
40.00	25.000	41.00	25.000	42.00	25.000
43.00	25.000	44.00	25.000	45.00	25.000
46.00	25.000	47.00	25.000	48.00	26.000
49.00	26.000	50.00	26.000	51.00	26.000
52.00	26.000	53.00	26.000	54.00	26.000
55.00	26.000	56.00	26.000	57.00	26.000
58.00	26.000	59.00	27.000	60.00	27.000
61.00	27.000	62.00	27.000	63.00	27.000
64.00	27.000	65.00	27.000	66.00	27.000
67.00	27.000	68.00	27.000	69.00	27.997
70.00	28.000	71.00	28.000	72.00	28.000
73.00	28.000	74.00	28.000	75.00	28.000
76.00	28.000	77.00	28.000	78.00	28.000
79.00	28.000	80.00	28.000	81.00	29.000
82.00	29.000	83.00	29.000	84.00	29.000
85.00	29.000	86.00	29.000	87.00	29.000
88.00	29.000	89.00	30.000	90.00	30.000
91.00	30.000	92.00	30.000	93.00	30.000
94.00	31.000	95.00	31.000	96.00	31.000
97.00	31.000	98.00	31.540	99.00	32.000

n = 922

Table 100

Percentile Ranks for Modified PSI, Parent Restriction of Role Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	19.000	2.00	22.000	3.00	23.690
4.00	25.000	5.00	25.000	6.00	26.000
7.00	27.000	8.00	27.000	9.00	28.000
10.00	28.000	11.00	28.530	12.00	29.000
13.00	29.000	14.00	30.000	15.00	30.000
16.00	30.000	17.00	30.000	18.00	31.000
19.00	31.000	20.00	31.600	21.00	32.000
22.00	32.000	23.00	33.000	24.00	33.000
25.00	34.000	26.00	34.000	27.00	34.000
28.00	34.000	29.00	34.670	30.00	35.000
31.00	35.000	32.00	35.000	33.00	35.000
34.00	35.000	35.00	36.000	36.00	36.000
37.00	36.000	38.00	36.000	39.00	36.000
40.00	36.000	41.00	36.476	42.00	37.000
43.00	37.000	44.00	37.000	45.00	37.000
46.00	38.000	47.00	38.000	48.00	38.000
49.00	38.000	50.00	38.000	51.00	38.000
52.00	39.000	53.00	39.000	54.00	39.000
55.00	39.000	56.00	39.000	57.00	40.000
58.00	40.000	59.00	40.000	60.00	40.000
61.00	40.000	62.00	40.000	63.00	40.000
64.00	41.000	65.00	41.000	66.00	41.000
67.00	41.000	68.00	41.770	69.00	42.000
70.00	42.000	71.00	42.000	72.00	42.000
73.00	42.000	74.00	43.000	75.00	43.000
76.00	43.000	77.00	43.000	78.00	43.000
79.00	44.000	80.00	44.000	81.00	44.000
82.00	44.000	83.00	44.000	84.00	45.000
85.00	45.000	86.00	45.000	87.00	46.000
88.00	46.000	89.00	47.000	90.00	47.000
91.00	47.000	92.00	47.000	93.00	48.000
94.00	48.000	95.00	49.000	96.00	49.000
97.00	51.000	98.00	52.000	99.00	54.000

n = 922

Table 101

Percentile Ranks for Modified PSI, Parent Depression Scale

Percentile	Value	Percentile	Value	Percentile	Value
1.00	23.000	2.00	24.000	3.00	25.000
4.00	26.000	5.00	27.000	6.00	28.000
7.00	28.000	8.00	28.840	9.00	29.000
10.00	29.000	11.00	29.000	12.00	30.000
13.00	30.000	14.00	30.000	15.00	31.000
16.00	31.000	17.00	31.000	18.00	32.000
19.00	32.000	20.00	32.000	21.00	32.000
22.00	32.000	23.00	32.000	24.00	33.000
25.00	33.000	26.00	33.000	27.00	33.000
28.00	34.000	29.00	34.000	30.00	34.000
31.00	34.000	32.00	34.000	33.00	34.000
34.00	34.000	35.00	34.000	36.00	35.000
37.00	35.000	38.00	35.000	39.00	35.000
40.00	35.000	41.00	35.000	42.00	35.000
43.00	36.000	44.00	36.000	45.00	36.000
46.00	36.000	47.00	36.000	48.00	36.000
49.00	36.000	50.00	36.000	51.00	37.000
52.00	37.000	53.00	37.000	54.00	37.000
55.00	37.000	56.00	37.000	57.00	37.000
58.00	38.000	59.00	38.000	60.00	38.000
61.00	38.000	62.00	38.000	63.00	38.000
64.00	38.000	65.00	38.000	66.00	38.000
67.00	38.000	68.00	38.000	69.00	38.000
70.00	39.000	71.00	39.000	72.00	39.000
73.00	39.000	74.00	39.000	75.00	39.000
76.00	39.000	77.00	40.000	78.00	40.000
79.00	40.000	80.00	40.000	81.00	40.000
82.00	41.000	83.00	41.000	84.00	41.000
85.00	41.000	86.00	42.000	87.00	42.000
88.00	42.000	89.00	43.000	90.00	43.000
91.00	43.000	92.00	44.000	93.00	44.000
94.00	45.000	95.00	45.000	96.00	46.000
97.00	46.000	98.00	47.000	99.00	49.000

n = 922

Table 102

Descriptive Statistics for Modified PSI Child and Parent Domain Scales

Variable	Mean	Std Dev
Child Domain Scales		
Distractibility/hyperactivity	27.07	5.25
Reinforces Parent	31.97	4.05
Adaptability	34.75	5.06
Acceptability	23.37	5.10
Demandingness	28.75	5.41
Mood	28.74	4.20
Parent Domain Scales		
Health	9.28	1.66
Relationship with Spouse	23.70	5.46
Social Isolation	22.31	4.37
Sense of Competence	34.05	3.88
Attachment	25.61	3.36
Restriction of Role	37.83	7.24
Depression	36.16	5.31

Validity Data

Correlations between the PSI Scales and the other unmodified family measures are presented in Tables 103 - 104. Relationships between the child domain scales and other family measure scores were generally low to moderate. Generally, the highest correlations were between PSI parent and child domain scores. Correlations between the child domain scales and the FSS, FRS, FACES-III, and FILE were generally low (e.g., below $\pm .20$).

PSI parent domain scale scores and the PSI total score had moderate positive correlations with family resources, and moderate negative correlations with life events. The relationship between parent stress and family support were generally low. In general, the correlations between the modified measure were similar in magnitude and direction as the unmodified correlations.

Table 103

Intercorrelation Between PSI Child Domain Scales and Other Family Measures

	PSI Adaptability	PSI Acceptability	PSI Demandingness	PSI Mood	PSI Reinfor. Parent	PSI Distrac./Hyper.
FRS External Support	.2563	.2095	.1784	.1519	.1448	.1949
FRS Physical Resources	.2008	.1560	.0981	.1200	.1420	.1871
FRS Time Availability	.2021	.2336	.1862	.1563	.1400	.1659
FRS General Resources	.1961	.1492	.0977	.1358	.1485	.1950
FRS Total Score	.2306	.2172	.1615	.1634	.1630	.2022
FACES-III Perceived Cohesion	.1379	.1913	.0655	.1787	.2041	.1668
FACES-III Perceived Adaptability	.0444	.0060	-.0114	.0443	.0086	-.0357
FACES-III Ideal Cohesion	.0841	.0666	-.0437	.0894	.1376	.1334
FACES-III Ideal Adaptability	-.0171	-.0188	-.0551	.0036	.0458	.0368
PSI Parent Depression	.3254	.4034	.3678	.2703	.2859	.2975
PSI Parent Attachment	.2370	.1926	.1784	.2216	.2848	.2670
PSI Parent Restriction of Role	.3301	.3435	.3913	.2519	.2420	.2322
PSI Parent Sense of Competence	.2917	.2485	.2974	.1948	.1604	.2389
PSI Parent Social Isolation	.3157	.2886	.2645	.1992	.2047	.1835
PSI Parent Relationship with Spouse	.2862	.3076	.3228	.2059	.1779	.1689
PSI Parent Health	.2690	.2302	.3187	.2015	.1050	.1434
PSI Total Stress	.6696	.6649	.6452	.5270	.4808	.5148
FILE Total	-.1085	-.1750	-.1627	-.0828	-.0516	-.0929
FILE Family Legal Violations	-.0567	-.0442	-.0270	-.0633	-.0458	-.1158
FILE transitions In and Out	-.0175	.0018	.0013	.0159	-.0251	-.0572
FILE Losses	-.0474	-.0172	.0200	-.0160	-.0245	-.0317
FILE Illness & Family Care Strains	-.0971	-.1173	-.1908	-.1075	-.0183	.0117
FILE Work/Family Transitions	.0142	-.0430	-.0663	.0248	.0410	-.0204
FILE Financial & Business Strains	-.0679	-.1096	-.1429	-.0600	-.0353	-.0474
FILE Intra-Family Strains	-.1285	-.2336	-.1541	-.0809	-.0806	-.1277
FILE Marital Strains	-.0581	-.0369	-.0260	-.0220	-.0108	-.0928
FILE Pregnancy & Childbirth Strains	-.0091	.0076	.0086	-.0839	-.0393	.0700
FSS Total	.1232	.1182	.0342	.1316	.1374	.1306
FSS General Professional Services	.0251	.0983	.0259	.0623	.1113	.0448
FSS Specialized Professional Services	.0158	-.0417	-.1061	.0609	.0910	.0071
FSS Informal Kinship	.1472	.1480	.0994	.1063	.1131	.1578
FSS Formal Kinship	.0606	.0927	.0448	.1000	.0664	.0730
FSS Social Organizations	.0948	.0587	-.0048	.1149	.0772	.1016
FSS Nuclear Family	.1455	.1308	.0622	.1004	.1211	.1359

Table 104

Intercorrelation Between PSI Parent Domain Scales and Other Family Measures

	PSI Depression	PSI Attachment	PSI Restri. of Role	PSI Sen. of Comp.	PSI Social Isolation	PSI Relat. w/Spouse	PSI Health	PSI Total Stress
FRS External Support	.2856	.1201	.3 .21	.2125	.3434	.3715	.2851	.4036
FRS Physical Resources	.2378	.1247	.2119	.1518	.2261	.2406	.1616	.2915
FRS Time Availability	.3237	.1304	.3902	.2003	.3501	.4443	.3319	.4209
FRS General Resources	.2403	.1357	.2467	.2020	.2615	.3075	.2091	.3237
FRS Total Score	.3096	.1498	.3466	.2238	.3279	.3938	.2862	.4091
FACES-III Perceived Cohesion	.2445	.1904	.1402	.1655	.1809	.3222	.1215	.2903
FACES-III Perceived Adaptability	-.0085	.0271	.0133	.0659	.1097	.1448	.0424	.0539
FACES-III Ideal Cohesion	.0878	.2149	-.0262	.0955	.0452	.0825	-.0576	.1083
FACES-III Ideal Adaptability	-.0391	.0778	-.0704	.0316	.0165	-.0231	-.0689	-.0177
FILE Total	-.2817	-.0361	-.2744	-.1303	-.2599	-.3502	-.3182	-.3040
FILE Family Legal Violations	-.0859	-.0409	-.0625	-.1317	-.0597	-.0699	-.0408	-.1088
FILE Transitions In and Out	-.0332	.0096	-.0133	-.0320	-.0696	-.0826	-.0366	-.0455
FILE Losses	-.0150	-.0009	-.0324	-.0156	-.0681	-.0699	-.0034	-.0430
FILE Illness & Family Care Strains	-.0963	.0116	-.1448	-.0986	-.0971	-.1541	-.2092	-.1664
FILE Work/Family Transitions	-.0760	.0689	-.0350	.0178	-.0653	-.0540	-.1113	-.0447
FILE Financial & Business Strains	-.2136	-.0056	-.2258	-.0980	-.1765	-.2236	-.2295	-.2146
FILE Intra-Family Strains	-.3539	-.1099	-.3361	-.1460	-.2967	-.4113	-.3404	-.3673
FILE Marital Strains	-.1400	-.0449	-.0993	-.0675	-.1561	-.2845	-.1525	-.1589
FILE Pregnancy & Childbirth Strains	-.0190	.0054	-.0691	-.0245	-.0834	-.0828	-.1066	-.0447
FSS Total	.1588	.1971	.1713	.0938	.2268	.2880	.1526	.2442
FSS General Professional Services	.1223	.1164	.0814	-.0084	.1191	.1118	.0655	.1182
FSS Specialized Professional Services	.0399	.1365	.0463	.0384	.1246	.1251	.0796	.0647
FSS Informal Kinship	.1792	.1772	.1913	.1384	.2639	.2872	.1510	.2750
FSS Formal Kinship	.0985	.0869	.1170	.0009	.1049	.1417	.0762	.1341
FSS Social Organizations	.0675	.1277	.1227	.0578	.1444	.1395	.1113	.1475
FSS Nuclear Family	.1402	.1674	.1242	.1258	.1369	.3746	.1346	.2446
PSI Child Adaptability	.3254	.2370	.3301	.2917	.3157	.2862	.2690	.6696
PSI Child Acceptability	.4034	.1926	.3435	.2485	.2886	.3076	.2302	.6649
PSI Child Demandingness	.3678	.1784	.3913	.2974	.2645	.3228	.3187	.6452
PSI Child Mood	.2703	.2216	.2519	.1948	.1992	.2059	.2015	.5270
PSI Child Reinforces Parent	.2859	.2848	.2420	.1604	.2047	.1779	.1050	.4808
PSI Child Distractibility/Hyperactivity	.2975	.2670	.2322	.2389	.1835	.1689	.1434	.5148

Table 105

Intercorrelation Between *Modified* PSI Child Domain Scales and Other Modified Family Measures

	PSI Adaptability	PSI Acceptability	PSI Demandingness	PSI Mood	PSI Reinfor. Parent	PSI Distrac./Hyper.
FRS Physical Resources	.1093	.0565	.0411	.0900	.1546	.1620
FRS Basic Resources	.1966	.1615	.1418	.1726	.1707	.2148
FRS Health/Medical	.1493	.1240	.1001	.1256	.1034	.1075
FRS Personal Time	.1851	.2790	.2678	.1833	.1608	.1537
FRS Family Time	.0864	.2670	.2177	.1209	.1207	.1000
FRS Extra Money	.1280	.1209	.1136	.1198	.1135	.1573
FRS Total Resources	.1985	.2195	.1973	.1841	.1791	.2022
FSS Family/Formal Kin	.0718	.1237	.0983	.0962	.0808	.0978
FSS Friends	.1064	.1275	.1177	.1390	.1193	.1536
FSS Informal Support	.1098	.1499	.0992	.1314	.1467	.1164
FSS Social Groups	.0653	.0830	.0558	.0719	.0591	.1052
FSS Professional Support	-.0106	-.0560	-.0621	-.0313	.1115	.0211
FSS Total Support	.0899	.1122	.0802	.1066	.1420	.1306
FACES-III Perceived Cohesion	.1183	.1662	.0944	.1743	.2232	.1668
FACES-III Perceived Adaptability	-.0110	-.0388	-.0493	-.0085	-.0115	-.0703
FACES-III Perceived Democratic Family Style	.1059	.0212	.0486	.1050	.0534	.0217
FACES-III Ideal Cohesion	.0756	.0319	-.0451	.0881	.1280	.1083
FACES-III Ideal Adaptability	-.0354	-.0501	-.0610	-.0192	.0079	-.0095
FACES-III Democratic Family Style	.0379	-.0283	-.0289	.0249	.0464	.0839
PSI Parent Depression	.2563	.3687	.4178	.3120	.3131	.2728
PSI Parent Restriction of Role	.3141	.3494	.4465	.3068	.2510	.2007
PSI Parent Attachment	.2835	.2304	.2472	.3159	.3380	.3206
PSI Parent Sense of Competence	.1895	.1992	.2799	.1625	.0885	.1507
PSI Parent Social Isolation	.2899	.3262	.3410	.2845	.2795	.2273
PSI Parent Relationship with Spouse	.2447	.3037	.3580	.2605	.2151	.1689
PSI Parent Health	.1172	.1221	.1980	.1324	.0775	.1430
PSI Total Stress	.6068	.6645	.7069	.6459	.5511	.5148
FILE Total	-.0749	-.1776	-.1932	-.0884	-.0842	-.0929
FILE Family Legal Violations	-.0617	-.0373	-.0305	-.0579	-.0669	-.1158
FILE Transitions In and Out	-.0188	.0148	-.0081	.0083	-.0329	-.0572
FILE Losses	-.0498	-.0066	.0189	-.0355	-.0451	-.0317
FILE Illness & Family Care Strains	-.0931	-.1060	-.1720	-.0850	-.0690	.0117
FILE Work/Family Transitions	.0235	-.0481	-.0801	.0360	.0295	-.0204
FILE Financial & Business Strains	-.0318	-.1247	-.1645	-.0384	-.0520	-.0474
FILE Intra/Family Strains	-.0847	-.2528	-.2006	-.1308	-.0933	-.1277
FILE Marital Status	-.0380	-.0394	-.0497	-.0388	-.0208	-.0928
FILE Pregnancy and Childbirth Strains	-.0101	.0648	.0075	-.0157	-.0738	.0700

Table 106

Intercorrelation Between *Modified* PSI Parent Domain Scales and Other Modified Family Measures

	PSI Depression	PSI Attachment	PSI Restrict. of Role	PSI Sen. of Comp.	PSI Social Isolation	PSI Relat. w/Spouse.	PSI Health	PSI Total Stress
FRS Physical Resources	.1135	.0837	.1850	.0353	.1614	.1013	.0476	.1759
FRS Basic Resources	.2263	.2537	.2541	.0592	.3155	.2987	.1247	.3417
FRS Health/Medical	.1312	.1923	.1462	.0046	.2424	.2163	.1019	.2304
FRS Personal Time	.2889	.4425	.1494	.1534	.4606	.4413	.2141	.4454
FRS Family Time	.2498	.2895	.1043	.1240	.3254	.3714	.1691	.3316
FRS Extra Money	.1886	.2819	.1765	.0369	.3206	.3369	.1448	.3018
FRS Total Resources	.2653	.3525	.2261	.0896	.4094	.3938	.1798	.4091
FSS Family/Formal Kin	.0543	.0914	.1198	-.0083	.1884	.1848	.0751	.1652
FSS Friends	.1549	.1646	.2510	.0295	.3063	.4012	.0999	.2884
FSS Informal Support	.1447	.1802	.2448	.0110	.2632	.2300	.0612	.2472
FSS Social Groups	.0526	.0999	.1423	-.0282	.1824	.1408	.0240	.1433
FSS Professional Support	.0346	.0509	.1526	-.0282	.1508	.1177	.0374	.0708
FSS Total Support	.1168	.1562	.2450	-.0075	.2939	.2880	.0819	.2442
FACES-III Perceived Cohesion	.2233	.1220	.2588	.0383	.2341	.3222	.0892	.2903
FACES-III Perceived Adaptability	-.0866	-.0338	.0297	-.0092	.0283	.0441	-.0662	-.0333
FACES-III Perceived Democratic Family Style	.0785	.0874	.0610	.0316	.1733	.2017	.0498	.1350
FACES-III Ideal Cohesion	.0727	-.0639	.2144	.0077	.0399	.0501	-.0547	.0822
FACES-III Ideal Adaptability	-.0931	-.1054	.0508	-.0539	-.0367	-.0674	-.0867	.0712
FACES-III Ideal Democratic Family Style	.0133	.0113	.1059	.0108	.0722	.0586	-.0212	.0521
PSI Child Adaptability	.2563	.3141	.2835	.1895	.2899	.2447	.1172	.6068
PSI Child Acceptability	.3687	.3494	.2304	.1992	.3262	.3037	.1221	.6645
PSI Child Demandingness	.4178	.4465	.2472	.2799	.3410	.3580	.1980	.7069
PSI Child Mood	.3120	.3068	.3159	.1625	.2845	.2605	.1324	.6459
PSI Child Reinforces Parent	.3131	.2510	.3380	.0885	.2795	.2151	.0775	.5511
PSI Child Distractibility/Hyperactivity	.2728	.2007	.3206	.1507	.2273	.1689	.1430	.5148
FILE Total	-.2699	-.3053	-.0559	-.1158	-.2941	-.3502	-.2335	-.3040
FILE Family Legal Violations	-.0814	-.0577	-.0690	-.0930	-.0679	-.0699	-.0569	-.1088
FILE Transitions In and Out	-.0388	-.0200	-.0026	-.0035	-.0561	-.0826	-.0339	-.0455
FILE Losses	-.0338	-.0422	-.0320	.0301	-.0391	-.0699	-.0134	-.0430
FILE Illness & Family Care Strains	-.1054	-.1862	.0101	-.1086	-.0962	-.1541	-.1609	.1664
FILE Work/Family Care Strains	-.0671	-.0490	.0558	.0174	-.0847	-.0540	-.0809	-.0447
FILE Financial & Business Strains	-.1994	-.2603	-.0110	-.1079	-.2002	-.2236	-.1632	-.2146
FILE Intra-Family Strains	-.3326	-.3526	-.1220	-.1425	-.3521	-.4163	-.2396	-.3673
FILE Marital Strains	-.1367	-.0943	-.0664	-.0216	-.1740	-.2845	-.1226	-.1589
FILE Pregnancy & Childbirth Strains	-.0215	-.0866	.0049	-.0081	-.0833	-.0828	-.0730	-.0447

Family Inventory of Life Events (FILE)

Descriptive data for the FILE at Year 1 are presented in Technical Appendix E. The FILE presented a unique analytic situation. The dichotomous nature of the data and the checklist nature of the questions calls into question the appropriateness made in many traditional analyses. For instance, although traditional test-retest reliability analyses could be conducted, the utility of the analysis would be questionable. It would not be theoretically expected that the number and type of life events should be stable over time. These matrices may be employed for further analyses by interested readers or to replicate the present results.

Structural analyses of dichotomous data also presents some noteworthy problems. The distribution of items is often skewed or leptokurtic, particularly on an instrument like the FILE which assessed low base-rate events (e.g., started a new business, retired from work). Because of the violation of the multivariate normality assumption with categorical data, alternative estimation strategies have been developed for which there are no distributional restrictions (e.g., skewness and kurtosis). These include weighted least squares (WLS) and arbitrary general least squares (ALS), among others (e.g., Bentler, 1992; SPSS, 1993). Although the theory and application of these distribution free analyses are available, practical application of the theory is limited. Most importantly, this type of analyses is very computer-intensive. Bentler (1992) notes, "because of the heavy computer demands, (estimation) probably becomes impractical as the number of variables exceeds 20 or so" (p. 3). Similarly, Muthén (1993) highlights that the larger the model, the larger the sample size needed. χ^2 values will be inflated by too small a sample size. Muthén (1993) notes that for larger models of 15 variables conventional methods of estimation do not work well at a sample size of 1,000, and "can be said to be only marginally acceptable at sample size 4,000" (p. 231).

Thus, structural analysis of the FILE was untenable. Even with the heavy computer demands (e.g., error messages requesting 25 million more bytes of memory), the sample size available would be insufficient to produce any trustworthy fit statistics. The questionable fit statistics noted by Muthén was supported by the results of an conventional structural analysis done on the

polychoric correlation matrix generated from the FILE data. Fit statistics were very high (e.g., .98). However, an exploratory factor analyses of the same data suggested that the author's nine factors accounted for a mere 32% of the data.

Analysis of the FILE conducted focused on description of the data with a sample of families having children with disabilities including item means and standard deviation and normative information.

Internal Consistency and Test-Retest Reliability

Internal consistency and test-retest reliability for the FILE subscale and total scores were computed and are presented in Tables 107 and 108. Reliability coefficients are similar to those reported in the literature. The longitudinal stability of the scores across one and two years is relatively low for most FILE scales. This is not surprising, as one would not expect life event to show temporal stability.

Table 107

Internal Consistency Reliability of FILE Scales

FILE Scale	Internal Consistency Reliability
Family & Legal Violations	.67
Transitions In and Out	.38
Losses	.32
Illness & Family Care Strains	.55
Work/Family Transitions	.56
Financial & Business Strains	.51
Intra-Family Strains	.73
Marital Strains	.52
Pregnancy & Childbirth Strains	.45
Total	.82

Table 108
Test-Retest Reliability for FILE Scales

FILE Scale	Year1-Year2	Year1-Year3	Year2-Year3
Family & Legal Violations	.36	.51	.55
Transitions In and Out	.35	.11	.35
Losses	.25	.09	.22
Illness & Family Care Strains	.38	.30	.42
Work/Family Transitions	.47	.26	.46
Financial & Business Strains	.50	.37	.54
Intra-Family Strains	.54	.48	.59
Marital Strains	.47	.21	.52
Pregnancy & Childbirth Strains	.27	.19	.16
Total	.58	.45	.65

Normative Data

Percentile ranks for the FILE total score are presented in Table 109. Percentile ranks for each subscale are not included because of the low frequency of "yes" responses and the author's recommendation that interpretation of FILE data be based on the total score. Descriptive statistics for FILE subscale and total scores are presented in Table 110. To further assist in interpretation of FILE data, the percentage of "yes" and "no" responses for each item are presented in Table 111.

Table 110
Descriptive Statistics for FILE Subscale and Total Scores

Variable	Mean	Std Dev
Family & Legal Violations	.13	.53
Transitions In & Out	.31	.64
Losses	.39	.69
Illness & Family Care Strains	1.04	1.30
Work/Family Transitions	2.08	1.80
Intra-Family Strains	3.68	2.94
Marital Strains	.40	.76
Pregnancy & Childbirth Strains	.44	.75
Financial & Business Strains	2.32	1.76

Table 109

Percentile Ranks for FILE Total Score

Percentile	Value	Percentile	Value	Percentile	Value
1.00	.000	2.00	1.000	3.00	1.000
4.00	1.000	5.00	2.000	6.00	2.000
7.00	2.000	8.00	3.000	9.00	3.000
10.00	3.000	11.00	4.000	12.00	4.000
13.00	4.000	14.00	4.000	15.00	4.000
16.00	4.680	17.00	5.000	18.00	5.000
19.00	5.000	20.00	5.000	21.00	5.000
22.00	5.060	23.00	6.000	24.00	6.000
25.00	6.000	26.00	6.000	27.00	6.000
28.00	6.000	29.00	6.000	30.00	6.000
31.00	7.000	32.00	7.000	33.00	7.000
34.00	7.000	35.00	7.000	36.00	7.000
37.00	8.000	38.00	8.000	39.00	8.000
40.00	8.000	41.00	8.000	42.00	8.660
43.00	9.000	44.00	9.000	45.00	9.000
46.00	9.000	47.00	9.000	48.00	10.000
49.00	10.000	50.00	10.000	51.00	10.000
52.00	10.000	53.00	11.000	54.00	11.000
55.00	11.000	56.00	11.000	57.00	11.000
58.00	11.000	59.00	11.000	60.00	12.000
61.00	12.000	62.00	12.000	63.00	12.000
64.00	12.000	65.00	12.000	66.00	13.000
67.00	13.000	68.00	13.000	69.00	13.000
70.00	13.000	71.00	14.000	72.00	14.000
73.00	14.000	74.00	14.000	75.00	15.000
76.00	15.000	77.00	15.000	78.00	15.000
79.00	16.000	80.00	16.000	81.00	16.000
82.00	16.860	83.00	17.000	84.00	17.000
85.00	17.000	86.00	18.000	87.00	18.000
88.00	18.000	89.00	19.000	90.00	19.000
91.00	20.000	92.00	20.160	93.00	21.000
94.00	22.000	95.00	23.000	96.00	25.000
97.00	26.000	98.00	27.540	99.00	30.770

N = 922

Table 111
Frequency Data for FILE Items

Item	Content	%no	%yes
FILE1	fathers time away	62	38
FILE2	mothers time away	79	21
FILE3	emotional probs in family	77	23
FILE4	Drug, OH prob in family	95	5
FILE5	increased spousal conflict	76	24
FILE6	more argue parents/kids	79	21
FILE7	increased conflict among kids	80	20
FILE8	increased difficulty managing teenagers	92	8
FILE9	increased difficulty managing school kids	87	13
FILE10	increased difficulty managing preschoolers	78	22
FILE11	increased difficulty managing toddlers	86	14
FILE12	increased difficulty managing infants	88	12
FILE13	more outside activities for kids	51	49
FILE14	increased disagree about activities	83	17
FILE15	more unresolved issues	79	21
FILE16	more unfinished chores	59	41
FILE17	increased conflict with in-laws	82	18
FILE18	separated, divorced	88	12
FILE19	affair	96	4
FILE20	increased difficulty with ex	91	9
FILE21	increased difficulty in sex	85	15
FILE22	unwanted pregnancy	87	13
FILE23	unmarried pregnancy	92	8
FILE24	abortion	99	1
FILE25	birth or adoption	77	23
FILE26	loan to cover expenses	75	25
FILE27	welfare	86	14
FILE28	hurt in familyily business	91	9
FILE29	hurt family investments	95	5
FILE30	new business	94	6
FILE31	new home	89	11
FILE32	car, major purchase	65	35
FILE33	credit card debts	87	13
FILE34	high med/dental costs	56	44
FILE35	high necessity costs	57	43
FILE36	high education costs	82	18
FILE37	delay in alimony payments	92	8
FILE38	new job	72	28
FILE39	lost job	78	22
FILE40	retired	99	1
FILE41	returned to work	77	23
FILE42	extended work absence	81	19
FILE43	dissatisfaction with work	77	23
FILE44	difficulty with colleagues	84	16
FILE45	promoted	72	28
FILE46	moved	74	26

(table continues)

Table 111 (continued)

Frequency Data for FILE Items

Item	Content	%no	%yes
FILE47	new school for child	78	22
FILE48	parent illness, injury	89	11
FILE49	child illness, injury	80	20
FILE50	relative illness, injury	77	23
FILE51	chronically ill, disabled	88	12
FILE52	difficulty managing ill member	91	9
FILE53	relative to nursing home	95	5
FILE54	care to parents	94	6
FILE55	difficulty in child care	82	18
FILE56	parent death	98	2
FILE57	child death	97	3
FILE58	relative death	85	15
FILE59	friend death	89	11
FILE60	child divorced	98	2
FILE61	end of close relationship	93	7
FILE62	married	94	6
FILE63	child leaves home	95	5
FILE64	begin college	96	4
FILE65	new move into house	92	8
FILE66	parent returns to school	92	8
FILE67	jail	96	4
FILE68	arrested	95	5
FILE69	sexual abuse or violence	98	2
FILE70	ran away from home	98	2
FILE71	dropped out of school	98	2

Establishing Validity

Correlations between FILE subscale and total scores and the other unmodified family measures are presented in Table 111. Correlations were generally low to moderate, ranging in magnitude from .001 to .416. As would be expected, the FILE total score had the highest relationships with family resources and parent stress. The relationships between FILE scores and family support, family cohesion and adaptability, and the child domain scales of the PSI were low.

Table 112

Intercorrelation Between FILE and Other Family Measures

	FILE Total	FILE Family Legal Vio.	FILE Transi. In & Out	FILE Losses	FILE Illness & Fam. Care Strains	FILE Work/Fam. Trans.	FILE Fianan. & Bus. Strains	FILE Intra-Family Strains	FILE Marital Strains	FILE Peg./CB Str.
FRS External Support	-.3434	-.1368	-.0237	-.0321	-.1894	-.1149	-.2800	-.3320	-.2326	-.0920
FRS Physical Resources	-.2654	-.1483	-.0095	-.0090	-.0987	-.1235	-.2678	-.2365	-.1745	-.0370
FRS Time Availability	-.4174	-.1327	-.0396	-.0036	-.1867	-.1624	-.3561	-.4391	-.2281	-.0756
FRS General Resources	-.3132	-.1492	-.0387	-.0271	-.1344	-.1247	-.3119	-.2658	-.2190	-.0912
FRS Total Score	-.3834	-.1593	-.0354	-.0162	-.1778	-.1459	-.3432	-.3716	-.2357	-.0888
FACES-III Perceived Cohesion	-.1585	-.1295	-.0661	-.0507	-.0331	-.0169	-.0984	-.1768	-.1978	-.0709
FACES-III Perceived Adaptability	.1123	.0296	.0478	.0398	.0501	.0811	.0867	.0927	.0136	.0371
FACES-III Ideal Cohesion	.0669	-.0435	-.0004	-.0208	.0695	.1118	.0819	.0439	-.0691	-.0376
FACES-III Ideal Adaptability	.1565	.0144	.0623	-.0010	.0925	.0693	.1467	.1534	.0263	.0285
FSS Total	-.0676	-.0398	-.0114	-.0387	.0236	.0288	-.0236	-.1265	-.1490	-.0051
FSS General Professional Services	.0020	.0364	.0461	.0654	.0630	-.0144	-.0341	-.0417	-.0240	.0859
FSS Specialized Professional Services	-.0429	-.0162	-.0518	-.0082	-.0037	.0317	-.0292	-.0262	-.0746	-.1402
FSS Informal Kinship	-.0907	-.0280	-.0003	.0262	.0237	-.0304	-.0464	-.1289	-.1498	-.0110
FSS Formal Kinship	-.0242	-.0436	.0295	.0589	.0436	.0626	-.0174	-.1286	-.0386	.0950
FSS Social Organizations	.0147	-.0272	-.0008	.0475	.0110	.0310	.0461	-.0101	-.0527	-.0014
FSS "Unclear Family"	-.1176	-.0798	-.0665	-.0203	-.0370	.0614	-.0013	-.1783	-.2728	-.0156
PSI Child Adaptability	-.1085	-.0567	-.0175	-.0474	-.0971	.0142	-.0679	-.1285	-.0581	-.0091
PSI Child Acceptability	-.1750	-.0442	.0018	-.0172	-.1173	-.0430	-.1096	-.2336	-.0369	.0076
PSI Child Demandingness	-.1627	-.0270	.0013	.0200	-.1908	.0663	-.1429	-.1541	-.0260	.0086
PSI Child Mood	-.0828	-.0633	.0159	-.0160	-.1075	.0248	-.0600	-.0809	-.0220	-.0839
PSI Child Reinforces Parent	-.0516	-.0438	-.0251	-.0245	-.0183	.0410	-.0353	-.0806	-.0108	-.0393
PSI Child Distractibility/Hyperactivity	-.0929	-.1158	-.0572	-.0317	.0117	-.0204	-.0474	-.1277	-.0928	.0700
PSI Parent Depression	-.2817	-.0859	-.0332	-.0150	-.0963	-.0760	-.2136	-.3539	-.1400	-.0190
PSI Parent Attachment	-.0361	-.0409	.0096	-.0009	.0116	.0689	-.0056	-.1099	-.0449	.0054
PSI Parent Restriction of Role	-.2744	-.0625	-.0133	-.0324	-.1448	-.0350	-.2258	-.3361	-.0993	-.0691
PSI Parent Sense of Competence	-.1303	-.1317	-.0320	-.0156	-.0986	.0178	-.0980	-.1460	-.0675	-.0245
PSI Parent Social Isolation	-.2599	-.0597	-.0696	-.0681	-.0971	-.0653	-.1765	-.2967	-.1561	-.0834
PSI Parent Relationship with Spouse	-.3502	-.0699	-.0826	-.0699	-.1541	-.0540	-.2236	-.4163	-.2845	-.0828
PSI Parent Health	-.3182	-.0408	-.0366	-.0034	-.2092	-.1113	-.2295	-.3404	-.1525	-.1066
PSI Total Score	-.3040	-.1088	-.0455	-.0430	-.1664	-.0447	-.2146	-.3673	-.1589	-.0447

REFERENCES

- Abidin, R. R. (1990). Parenting stress index-manual. Charlottesville, VA: Pediatric Psychology Press.
- Adams, J. (1992). Family-Centered care: Projects and products, an overview of relevant programs and materials from special projects of regional and national significance (SPRANS/MCHIP). St. Paul, MN: The Exchange Pathfinder Resources, Inc.
- American Psychological Association, American Educational Research Association, & National Council on Measurement in Education. (1985). Standards for educational and psychological testing. Washington, DC: American Psychological Association.
- Bailey, D., Jr. (1987). Current issues in early intervention. In Screening Children for Auditory Function. F. H. Bess & J. W. Hall, III (Eds). Nashville, TN: Bill Wilkerson Center Press.
- Baily, D. B., & Wolery, M. (1992). Teaching infants and preschoolers with disabilities (2nd ed.). New York: MacMillan.
- Bentler, P. M. (1992). EQS Structural Equations Program Manual. Los Angeles: BMDP Statistical Software.
- Bloom, B. L. (1985). A factor analysis of self-report measures of family functioning. Family Process, 24, 225-239.
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. American Psychologist, 32, 513-531.
- Byrne, B. (1989). A Primer of LISREL: Basic Applications and Programming for Confirmatory Factor Analytic Models. New York: Springer-Verlag.
- Byrne, B. (1994). Structural Equation Modeling with EQS and EQS/Windows: Basic Concepts, Applications, and Programming. London: SAGE.
- Cameron, S. J., & Orr, R. R. (1989). Stress in families of school-aged children with delayed mental development. Canadian Journal of Rehabilitation, 2(3), 134-144.
- Casto, G., & Lewis, A. (1984). Selecting outcome measures in early intervention. Journal of the Division for Early Childhood, 10(2), 118-123.
- Casto, G., & Mastropieri, M. A. (1986). The efficacy of early intervention programs: A meta-analysis. Exceptional Children, 52, 417-424.
- Chavkin, D. E. (1986). Stress in mothers of eight- to twelve-year old autistic and spina bifida children. Unpublished doctoral dissertation, Rutgers University, New Brunswick, New Jersey.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 35, 509-511.

- Cudeck, R. (1989). The analysis of correlation matrices using covariance structure models. Psychological Bulletin, 105, 317-327.
- Dunst, C. (1985). Rethinking early intervention. Analysis and Intervention in Developmental Disabilities, 5, 165-201.
- Dunst, C. J., Jenkins, V., & Trivette, C. M. (1984). The family support scale: Reliability and validity. Journal of Individual, Family, and Community Wellness, 1, 45-52.
- Dunst, C. J., & Leet, H. E. (1985). Family Resource Scale. Morganton, NC: Western Carolina Center.
- Dunst, C. J., Snyder, S. W., & Mankinen, M. (1989). Efficacy of early intervention. In M. C. Wang, M. C. Reynolds, & H. J. Walberg (Eds.), Handbook of Special Education, 3, 259-294.
- Dunst, C. J., & Trivette, C. M. (1986). Family Support Scale: Supplemental scoring instructions. Morganton, NC: Western Carolina Center.
- Früge, E. & Adams, C. (1992). Chronic illness and family systems. In J. van Eys, D. R. Copeland, & E. R. Davidson (Eds.) Teaching More Than Medicine. Houston: MD Anderson Cancer Center.
- Greenberg, D. (1983). Support systems and parent stress in families with trainable mentally retarded children. Unpublished doctoral dissertation, Temple University, Philadelphia.
- Holroyd, J. (1974). The questionnaire on resources and stress: An instrument to measure family responses to a handicapped family member. Journal of Community Psychology, 2, 92-94.
- Jenkins, B. B. (1982). Stress in mothers of regular and special nursery school children. Unpublished doctoral dissertation, Rutgers University, New Brunswick, New Jersey.
- Jöreskog, K. G. (1993). Testing structural equation models. In K.A. Bollen and J. S. Long (Eds.). Testing Structural Equation Models (pp 294 - 316). Newbury Park, CA: SAGE.
- Jöreskog, K. G. & Sörbom, D. (1989). LISREL 7: A guide to the program and applications (2nd ed.). Chicago: SPSS Inc.
- Kazak, A. E., & Marvin, R. S. (1984). Differences, difficulties, and adaptation: Stress and social networks in families with a handicapped child. Family Relations, 33, 1-11.
- Krauss, M. W., Hauser-Cram, P., Upshur, C. C., & Shonkoff, J. P. (1989, April). Parenting a child with disabilities: Differences between mothers and fathers in reporting stress. Paper presented at the Biennial Meeting of the Society for Research in Child Development, Kansas City, MO.
- Lafiosca, T. (1981). The relationship of parent stress to anxiety, approval, motivation, and children's behavior problems. Unpublished doctoral dissertation, University of Virginia, Charlottesville.
- Loehlin, J. C. (1992). Latent variable models (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.

- McCubbin, H. I., Patterson, J. M., & Wilson, L. R. (1983). Family inventory of life events and changes. Family Social Science, University of Minnesota, St. Paul.
- McCubbin, M. A. (1989). Family stress and family strengths: A comparison of single- and two-parent families with handicapped children. Research in Nursing and Health, 12, 101-110.
- McLinden, S. E. (1988). The Comprehensive Evaluation of Family Functioning Scale. Logan, UT: Early Intervention Research Institute.
- Minuchin, S. (1974). Families and Family Therapy. Cambridge: Harvard University Press.
- Morrison, G. M., & Zetlin, A. (1988). Perceptions of communication cohesion, and adaptability in families of adolescents with and without learning handicaps. Journal of Abnormal Child & Psychology, 16(6), 675-685.
- Olson, D. H., Portner, J., & Lavee, Y. (1985). Faces III. Family Social Science, University of Minnesota, St. Paul.
- Olson, D. H., McCubbin, H. I., Barnes, H., Larsen, A., Muxen, M., & Wilson, M. (1985). Family inventories. University of Minnesota, St. Paul.
- Oppenheimer, P. M. (1986). A comparison of methods for assessing attention deficit disorders with hyperactivity in emotionally disturbed, learning disabled and normal children. Unpublished doctoral dissertation, University of Virginia, Charlottesville.
- Perez, L. L. (1989). Maternal depression, parenting stress, social support, and coping mechanisms: A comparison of Puerto Rican clinic and non-clinic latency-age boys. Unpublished doctoral dissertation, New York University.
- Ramey, C. T., McPhee, D., & Yeates, K. O. (1982). Preventing developmental retardation: A general systems model. In L. A. Bond, & J. M. Joffe (Eds.), Facilitating infant and early childhood development. London: University Press of New England.
- White, K. R., Casto, G., Mott, S. E., Barnett, W. S., Pezzino, J., Lowitzer, A. C., Eiserman, E. D., Wingate-Corey, T., Immel, M., & Innocenti, M. S. (1987). 1986-87 annual report of the longitudinal studies of the effects and cost of early intervention for handicapped children (Contract #800-85-0173). Early Intervention Research Institute, Utah State University, Logan. (ERIC Clearinghouse on Handicapped and Gifted Youth #ED 293 241)
- White, K. R., & Mott, S. E. (1987). Conducting longitudinal research on the efficacy of early intervention with handicapped children. Journal of the Division for Early Childhood, 12, 13-22.

APPENDICES

Appendix A

Family Adaptability and Cohesion Evaluation Scales III

Table 1
Descriptive Statistics for FACES-III Perceived Scale, Items 1-20

VARIABLE	MEAN	ST. DEV.	SKEWNESS	KURTOSIS	MINIMUM	FREQ.	MAXIMUM	FREQ.
FACES1	3.683	1.015	-.725	.181	1.000	13	5.000	70
FACES2	2.647	.963	-.118	-.033	1.000	56	5.000	11
FACES3	3.896	1.009	-.575	-.333	1.000	6	5.000	119
FACES4	2.210	1.061	.476	-.470	1.000	113	5.000	9
FACES5	3.562	1.004	-.562	-.102	1.000	12	5.000	55
FACES6	2.265	1.190	.496	-.785	1.000	126	5.000	14
FACES7	4.023	1.136	-1.028	.148	1.000	13	5.000	157
FACES8	2.664	.926	.010	.115	1.000	43	5.000	11
FACES9	3.745	1.039	-.630	-.223	1.000	9	5.000	88
FACES10	2.747	1.287	.082	-1.012	1.000	84	5.000	35
FACES11	4.414	.905	-1.649	2.357	1.000	5	5.000	216
FACES12	1.560	.795	1.391	1.635	1.000	206	5.000	2
FACES13	3.884	1.151	-.693	-.483	1.000	12	5.000	142
FACES14	2.194	.934	.207	-.656	1.000	98	5.000	3
FACES15	3.736	1.130	-.660	-.308	1.000	16	5.000	104
FACES16	2.563	1.265	.312	-.921	1.000	93	5.000	29
FACES17	3.300	1.189	-.401	-.656	1.000	35	5.000	54
FACES18	1.840	1.167	1.276	.680	1.000	197	5.000	18
FACES19	4.562	.768	-1.934	3.697	1.000	2	5.000	240
FACES20	1.925	1.191	1.101	.207	1.000	184	5.000	18

n=345

Table 2

Descriptive Statistics for FACES-III Ideal Scale, Items 21-40

VARIABLE	MEAN	ST. DEV.	SKEWNESS	KURTOSIS	MINIMUM	FREQ.	MAXIMUM	FREQ.
FACES21	4.154	.819	-.705	.201	1.000	2	5.000	135
FACES22	2.808	.951	-.036	-.097	1.000	34	5.000	13
FACES23	4.241	.871	-1.045	.771	1.000	3	5.000	164
FACES24	2.614	1.110	.243	-.540	1.000	64	5.000	20
FACES25	3.739	1.007	-.597	.218	1.000	12	5.000	81
FACES26	2.325	1.198	.475	-.751	1.000	116	5.000	17
FACES27	4.328	1.012	-1.675	2.309	1.000	11	5.000	204
FACES28	2.951	1.087	.167	-.334	1.000	33	5.000	38
FACES29	4.174	.813	-.786	.276	1.000	1	5.000	136
FACES30	3.384	1.264	-.380	-.800	1.000	37	5.000	80
FACES31	4.701	.639	-2.541	7.217	1.000	1	5.000	268
FACES32	1.846	.938	.991	.572	1.000	155	5.000	5
FACES33	4.446	.855	-1.645	2.392	1.000	3	5.000	217
FACES34	2.291	1.058	.538	-.136	1.000	94	5.000	14
FACES35	4.409	.809	-1.505	2.422	1.000	3	5.000	196
FACES36	3.325	1.151	-.279	-.524	1.000	29	5.000	62
FACES37	4.107	.987	-1.093	.827	1.000	8	5.000	148
FACES38	4.043	1.336	-1.227	.169	1.000	33	5.000	192
FACES39	4.739	.621	-3.132	12.195	1.000	3	5.000	278
FACES40	3.878	1.214	-.893	-.119	1.000	23	5.000	143

n=345

Table 3

Descriptive Statistics for FACES-III Perceived Scale, items 1-20

VARIABLE	MEAN	ST. DEV.	SKEWNESS	KURTOSIS	MINIMUM	FREQ.	MAXIMUM	FREQ.
FACES1	3.756	1.007	-.590	-.178	1.000	13	5.000	145
FACES2	2.647	.981	.010	-.101	1.000	90	5.000	21
FACES3	4.062	.989	-.849	.167	1.000	11	5.000	245
FACES4	2.376	1.119	.292	-.858	1.000	166	5.000	15
FACES5	3.641	.967	-.467	-.232	1.000	11	5.000	107
FACES6	2.534	1.280	.254	-1.067	1.000	175	5.000	41
FACES7	4.076	1.115	-1.100	.385	1.000	22	5.000	278
FACES8	2.802	.986	-.022	-.209	1.000	64	5.000	25
FACES9	3.775	1.040	-.655	-.121	1.000	17	5.000	158
FACES10	2.737	1.313	.112	-1.097	1.000	145	5.000	61
FACES11	4.451	.836	-1.505	1.811	1.000	4	5.000	366
FACES12	1.702	.894	1.373	1.706	1.000	293	5.000	8
FACES13	4.017	1.042	-.800	-.267	1.000	8	5.000	243
FACES14	2.399	.977	.354	-.047	1.000	115	5.000	18
FACES15	3.839	1.057	-.753	.033	1.000	20	5.000	181
FACES16	2.683	1.224	.219	-.852	1.000	122	5.000	51
FACES17	3.357	1.189	-.363	-.653	1.000	52	5.000	109
FACES18	1.769	1.061	1.321	.965	1.000	326	5.000	17
FACES19	4.608	.740	-2.195	5.145	1.000	4	5.000	418
FACES20	2.003	1.179	1.047	.198	1.000	266	5.000	32

n=577

Table 4

Descriptive Statistics for FACES-III Ideal Scale, items 21-40

VARIABLE	MEAN	ST. DEV.	SKEWNESS	KURTOSIS	MINIMUM	FREQ.	MAXIMUM	FREQ.
FACES21	4.205	.862	-1.011	.756	1.000	4	5.000	252
FACES22	3.011	.940	-.123	.074	1.000	40	5.000	32
FACES23	4.307	.956	-1.471	1.852	1.000	13	5.000	323
FACES24	2.874	1.146	.001	-.719	1.000	83	5.000	47
FACES25	3.752	.933	-.505	-.163	1.000	7	5.000	125
FACES26	2.545	1.202	.270	-.898	1.000	144	5.000	34
FACES27	4.360	.971	-1.618	2.174	1.000	14	5.000	353
FACES28	3.031	1.104	-.023	-.552	1.000	55	5.000	60
FACES29	4.192	.831	-.974	.825	1.000	3	5.000	235
FACES30	3.539	1.200	-.478	-.641	1.000	41	5.000	149
FACES31	4.766	.555	-2.661	7.387	2.000	6	5.000	473
FACES32	2.045	.938	.709	.241	1.000	188	5.000	10
FACES33	4.497	.823	-1.838	3.376	1.000	6	5.000	379
FACES34	2.314	.983	.506	.064	1.000	128	5.000	18
FACES35	4.456	.779	-1.591	2.771	1.000	4	5.000	343
FACES36	3.447	1.188	-.314	-.768	1.000	38	5.000	135
FACES37	4.128	.974	-1.119	.984	1.000	14	5.000	253
FACES38	4.179	1.191	-1.352	.757	1.000	32	5.000	339
FACES39	4.815	.535	-3.398	12.286	2.000	9	5.000	500
FACES40	3.884	1.219	-.863	-.212	1.000	37	5.000	247

n=577

Table 5

Descriptive Statistics for FACES-III Perceived Scale, Items 1-20

VARIABLE	MEAN	ST. DEV.	SKEWNESS	KURTOSIS	MINIMUM	FREQ.	MAXIMUM	FREQ.
FACESA1	3.729	1.010	-.639	-.038	1.000	26	5.000	215
FACESA2	2.647	.974	-.036	-.082	1.000	146	5.000	32
FACESA3	4.000	.999	-.739	-.070	1.000	17	5.000	364
FACESA4	2.314	1.100	.362	-.741	1.000	279	5.000	24
FACESA5	3.612	.981	-.508	-.170	1.000	23	5.000	162
FACESA6	2.433	1.253	.348	-.987	1.000	301	5.000	55
FACESA7	4.056	1.123	-1.071	.285	1.000	35	5.000	435
FACESA8	2.751	.966	.001	-.106	1.000	107	5.000	36
FACESA9	3.764	1.039	-.644	-.166	1.000	26	5.000	246
FACESA10	2.740	1.302	.101	-1.070	1.000	229	5.000	96
FACESA11	4.437	.862	-1.571	2.093	1.000	9	5.000	582
FACESA12	1.649	.860	1.396	1.780	1.000	499	5.000	10
FACESA13	3.967	1.085	-.767	-.333	1.000	20	5.000	385
FACESA14	2.322	.966	.311	-.211	1.000	213	5.000	21
FACESA15	3.800	1.086	-.720	-.106	1.000	36	5.000	285
FACESA16	2.638	1.240	.250	-.889	1.000	215	5.000	80
FACESA17	3.336	1.189	-.376	-.657	1.000	87	5.000	163
FACESA18	1.796	1.102	1.310	.875	1.000	523	5.000	35
FACESA19	4.591	.751	-2.088	4.536	1.000	6	5.000	658
FACESA20	1.974	1.183	1.063	.189	1.000	450	5.000	50

n=922

Table 6

Descriptive Statistics for FACES-III Ideal Scale, items 21-40

VARIABLE	MEAN	ST. DEV.	SKEWNESS	KURTOSIS	MINIMUM	FREQ.	MAXIMUM	FREQ.
FACESA21	4.185	.846	-.901	.550	1.000	6	5.000	387
FACESA22	2.935	.949	-.092	-.014	1.000	74	5.000	45
FACESA23	4.282	.925	-1.329	1.509	1.000	16	5.000	487
FACESA24	2.776	1.139	.094	-.693	1.000	147	5.000	67
FACESA25	3.747	.961	-.589	.021	1.000	19	5.000	206
FACESA26	2.463	1.205	.342	-.869	1.000	260	5.000	51
FACESA27	4.348	.986	-1.641	2.233	1.000	25	5.000	557
FACESA28	3.001	1.097	.047	-.490	1.000	88	5.000	98
FACESA29	4.185	.824	-.904	.620	1.000	4	5.000	371
FACESA30	3.481	1.226	-.444	-.706	1.000	78	5.000	229
FACESA31	4.742	.588	-2.629	7.536	1.000	1	5.000	741
FACESA32	1.970	.943	.800	.295	1.000	343	5.000	15
FACESA33	4.478	.835	-1.759	2.962	1.000	9	5.000	596
FACESA34	2.305	1.011	.517	-.020	1.000	222	5.000	32
FACESA35	4.438	.790	-1.556	2.623	1.000	7	5.000	539
FACESA36	3.401	1.175	-.295	-.690	1.000	67	5.000	197
FACESA37	4.121	.978	-1.108	.915	1.000	22	5.000	401
FACESA38	4.128	1.248	-1.311	.539	1.000	65	5.000	531
FACESA39	4.786	.570	-3.298	12.577	1.000	3	5.000	778
FACESA40	3.882	1.216	-.873	-.184	1.000	60	5.000	390

n=922

Table 7

Variance-covariance matrix for FACES-III Perceived Scale, items 1-20
N=922

	FACES1	FACES2	FACES3	FACES4	FACES5	FACES6
FACES1	1.020780					
FACES2	.196998	.948118				
FACES3	.269288	.111588	.998915			
FACES4	.180222	.506311	.171031	1.210290		
FACES5	.200677	.114519	.212778	.134959	.963077	
FACES6	.137140	.125414	.064092	.228138	.070677	1.570190
FACES7	.255282	.161209	.245376	.174816	.289049	.199210
FACES8	.096165	.135914	.039091	.242020	.053957	.301456
FACES9	.340744	.137694	.319221	.150166	.391263	.107972
FACES10	.223054	.524170	.271881	.827115	.208670	.146162
FACES11	.284898	.127978	.301838	.072578	.195960	.050393
FACES12	.099817	.272261	.078089	.416433	.057438	.216461
FACES13	.286466	.153356	.319152	.132844	.317395	.031391
FACES14	-.022934	.071456	-.063355	.185521	-.016650	.277786
FACES15	.321449	.219532	.283359	.204624	.332851	.098494
FACES16	.195604	.175256	.180257	.327095	.091272	.254918
FACES17	.479149	.089065	.369179	.247676	.285089	.277590
FACES18	-.063299	-.004780	-.074673	.038465	-.028177	.290030
FACES19	.187770	.086513	.171550	.072283	.197194	-.001200
FACES20	-.029582	.037221	-.061858	.123458	-.052464	.182375

Table 7 (continued)

Variance-covariance matrix for FACES-III Perceived Scale, items 1-20
N=922

	FACES7	FACES8	FACES9	FACES10	FACES11	FACES12
FACES7	1.260660					
FACES8	.112906	.932274				
FACES9	.409673	.138565	1.079760			
FACES10	.200337	.173515	.312740	1.696380		
FACES11	.307541	.058123	.460680	.198602	.743595	
FACES12	.033726	.161320	.081528	.381106	.046410	.740319
FACES13	.288402	.076500	.391800	.217882	.345350	.020055
FACES14	-.003114	.283821	-.048671	.086953	-.062801	.156558
FACES15	.316384	.098914	.561883	.342545	.446716	.070380
FACES16	-.002365	.353693	.200971	.339306	.134101	.137179
FACES17	.382774	.162049	.445404	.348611	.331140	.103825
FACES18	-.015379	.102918	-.048600	-.014076	-.017213	.064559
FACES19	.218488	.041210	.323411	.193540	.336356	-.031616
FACES20	-.085456	.212826	-.051764	.120681	-.007068	.119953
	FACES13	FACES14	FACES15	FACES16	FACES17	FACES18
FACES13	1.178090					
FACES14	-.029668	.932314				
FACES15	.494025	-.044231	1.178370			
FACES16	.192999	.143849	.279089	1.537970		
FACES17	.371718	.016139	.381246	.386368	1.412830	
FACES18	-.075078	.185469	-.087744	.160724	.052620	1.213440
FACES19	.309164	-.054913	.386280	.129103	.252213	-.076910
FACES20	-.013880	.155320	.010000	.430003	.051466	.425956
	FACES19	FACES20				
FACES19	.563352					
FACES20	-.018256	1.399970				

Table 8

Variance-covariance matrix for FACES-III Ideal Scale, items 21-40
N=922

	FACES21	FACES22	FACES23	FACES24	FACES25	FACES26
FACES21	.715836					
FACES22	.211763	.900321				
FACES23	.245145	.174643	.856331			
FACES24	.223361	.573350	.215392	1.296870		
FACES25	.150069	.117379	.154946	.144257	.923038	
FACES26	.119833	.284502	.204930	.390203	.193606	1.451640
FACES27	.216575	.116723	.293680	.195196	.321521	.150907
FACES28	.081232	.209701	.058326	.352295	.091480	.371919
FACES29	.214208	.096442	.244059	.130593	.294477	.113904
FACES30	.209321	.469459	.279614	.821206	.149929	.244573
FACES31	.153248	.072360	.224881	.090970	.127964	.022893
FACES32	.064111	.346644	.113684	.516793	.094662	.352699
FACES33	.197839	.140483	.261281	.129346	.221982	.021738
FACES34	-.017224	.148611	-.074938	.183432	.048621	.301057
FACES35	.204204	.113927	.271524	.145076	.225945	.088094
FACES36	.164362	.271231	.132097	.336821	.099352	.371185
FACES37	.336898	.160759	.342625	.222647	.198663	.156392
FACES38	.162012	.116353	.180033	.110458	.084528	-.119278
FACES39	.124361	.061117	.162381	.069436	.090354	.012074
FACES40	.148986	.132581	.160410	.113602	.173132	-.047821

Table 8 (continued)

Variance-covariance matrix for FACES-III Ideal Scale, items 21-40
N=922

	FACES27	FACES28	FACES29	FACES30	FACES31	FACES32
FACES27	.972032					
FACES28	.144030	1.204120				
FACES29	.279550	.101862	.678920			
FACES30	.196608	.311671	.257540	1.503170		
FACES31	.259350	.057826	.206451	.152474	.345889	
FACES32	.047105	.272594	.039041	.409320	.017347	.888386
FACES33	.314292	.082000	.273843	.208948	.252809	.015184
FACES34	.016689	.356889	-.021567	.129890	-.041677	.198895
FACES35	.315250	.059242	.312781	.251575	.243525	.028081
FACES36	.151121	.489249	.133960	.396935	.099359	.250694
FACES37	.332233	.108447	.315421	.333962	.224410	.085960
FACES38	.232221	.086853	.101078	.088631	.174257	.012797
FACES39	.202591	.074065	.159106	.133242	.202115	.023003
FACES40	.179098	.122821	.194588	.227434	.146431	.060633
	FACES33	FACES34	FACES35	FACES36	FACES37	FACES38
FACES33	.697140					
FACES34	-.046203	1.022000				
FACES35	.348277	-.027094	.624295			
FACES36	.186782	.324766	.200732	1.380580		
FACES37	.279007	.015526	.319679	.297830	.957245	
FACES38	.240632	-.011780	.184975	.066057	.216064	1.557960
FACES39	.197857	-.036801	.195788	.106467	.200587	.209813
FACES40	.197758	.023156	.206038	.260306	.243481	.649386
	FACES39	FACES40				
FACES39	.324547					
FACES40	.156037	1.478950				

Table 9

Variance-Covariance matrix for FACES-III Perceived Scale, items 1-20
N=345

	FACES1	FACES2	FACES3	FACES4	FACES5	FACES6
FACES1	1.030420					
FACES2	.208888	.927266				
FACES3	.254605	.104462	1.018140			
FACES4	.125454	.425768	.153771	1.126570		
FACES5	.253414	.117138	.247746	.121288	1.008460	
FACES6	.060587	.046046	.085906	.174860	-.011578	1.415570
FACES7	.347490	.048626	.235003	.048130	.306767	.156656
FACES8	.067616	.100756	.031654	.234535	.052991	.243435
FACES9	.392815	.046023	.327943	.159296	.385128	.053260
FACES10	.276275	.443121	.355877	.727564	.198237	.033933
FACES11	.306080	.142670	.316628	.136301	.179036	.081695
FACES12	.035294	.167485	.072155	.329860	.032587	.130812
FACES13	.373055	.182759	.278528	.113644	.358991	.054072
FACES14	.018868	.097411	.014521	.145826	-.077545	.232018
FACES15	.442378	.179570	.280491	.205837	.311544	.104989
FACES16	.186048	.111844	.151951	.346844	-.006765	.235896
FACES17	.468234	.024304	.362838	.251926	.231686	.204478
FACES18	-.065203	.019057	-.022535	.027613	-.046990	.353317
FACES19	.239664	.053417	.134432	.075881	.203227	.030777
FACES20	-.104549	.033880	-.036903	.191896	-.131918	.129245

Table 9 (continued)

Variance-Covariance matrix for FACES-III Perceived Scale, items 1-20
N=345

	FACES7	FACES8	FACES9	FACES10	FACES11	FACES12
FACES7	1.290160					
FACES8	.089273	.857550				
FACES9	.436209	.143638	1.080100			
FACES10	.120531	.189370	.313863	1.655520		
FACES11	.368195	.099073	.472312	.291945	.818975	
FACES12	-.029545	.103517	.071454	.268553	.082035	.631360
FACES13	.464926	.091717	.461619	.251172	.397034	-.017151
FACES14	.015624	.286417	-.040437	.096422	-.072009	.070000
FACES15	.416064	.163962	.653455	.317467	.522438	.043488
FACES16	-.050873	.361404	.199289	.286699	.166024	.025300
FACES17	.324413	.086784	.414072	.385202	.288848	.092443
FACES18	.137434	.079758	-.011868	-.056341	.020012	-.007071
FACES19	.332755	.122759	.326989	.285679	.336013	-.028314
FACES20	-.085618	.262378	-.150093	.199189	-.000649	.110785
	FACES13	FACES14	FACES15	FACES16	FACES17	FACES18
FACES13	1.323730					
FACES14	-.023930	.872059				
FACES15	.605957	-.006766	1.276150			
FACES16	.209783	.172297	.240944	1.600040		
FACES17	.314967	.060666	.368233	.221071	1.413000	
FACES18	-.018608	.153872	-.077217	.210221	.128457	1.361070
FACES19	.361898	.044548	.416195	.131956	.270465	-.002774
FACES20	-.017484	.165841	-.080983	.367330	.087651	.444911
	FACES19	FACES20				
FACES19	.589855					
FACES20	-.038895	1.418720				

Table 10

Variance-covariance matrix for FACES-III Ideal Scale, items 21-40
N=345

	FACES21	FACES22	FACES23	FACES24	FACES25	FACES26
FACES21	.671099					
FACES22	.203924	.905093				
FACES23	.186771	.159782	.758814			
FACES24	.207758	.486920	.120043	1.231400		
FACES25	.202983	.179548	.222826	.087912	1.013140	
FACES26	.080797	.318369	.157137	.347368	.166330	1.435000
FACES27	.260583	.033635	.304693	.123259	.434530	.082314
FACES28	.059917	.150623	.020610	.286845	.117922	.361973
FACES29	.197042	.105873	.184783	.081198	.310035	.091633
FACES30	.123981	.428303	.199594	.703626	.135341	.138155
FACES31	.130300	.047310	.231918	.082038	.192240	-.001635
FACES32	.044031	.255368	.089500	.425950	.087692	.352458
FACES33	.198669	.196198	.246950	.120568	.233064	.011645
FACES34	-.011918	.169419	-.025647	.177267	.017029	.317923
FACES35	.239358	.154281	.267669	.153182	.304601	.076239
FACES36	.173820	.193369	.078649	.196206	.111097	.324537
FACES37	.349756	.221170	.290984	.189795	.304221	.104617
FACES38	.095046	.112798	.094161	.097538	.008468	-.194388
FACES39	.107053	.060362	.158873	.087912	.173028	-.031345
FACES40	.117594	.089787	.174722	.021917	.081522	-.160945

Table 10 (continued)

Variance-covariance matrix for FACES-III Ideal Scale, items 21-40
N=345

	FACES27	FACES28	FACES29	FACES30	FACES31	FACES32
FACES27	1.023220					
FACES28	.135372	1.180700				
FACES29	.282988	.087083	.661527			
FACES30	.133957	.194935	.178581	1.596970		
FACES31	.339350	.040479	.214863	.164387	.407701	
FACES32	.015521	.210514	.003467	.405081	.023744	.880377
FACES33	.344649	.030780	.270981	.191478	.276095	.074626
FACES34	-.021934	.406810	.002514	.107598	-.035036	.268746
FACES35	.386097	.084151	.263018	.239506	.282255	.039835
FACES36	.181151	.408485	.132331	.286411	.111737	.253621
FACES37	.412445	.066347	.286527	.368585	.235600	.060137
FACES38	.209555	-.003665	.067998	-.003749	.207786	-.098036
FACES39	.312437	.065597	.173407	.144062	.279449	.000483
FACES40	.162083	.040495	.184024	.173246	.199014	.013123
	FACES33	FACES34	FACES35	FACES36	FACES37	FACES38
FACES33	.730401					
FACES34	-.040047	1.118980				
FACES35	.357735	.021261	.655157			
FACES36	.212226	.425685	.189611	1.324540		
FACES37	.251407	.053931	.293251	.276129	.973930	
FACES38	.250885	.045665	.185667	.029449	.166835	1.785890
FACES39	.259226	-.011140	.246461	.087841	.225733	.246840
FACES40	.292872	.041516	.218504	.280915	.231117	.714611
	FACES39	FACES40				
FACES39	.385238					
FACES40	.215243	1.473510				

Table 11

Variance-Covariance matrix for FACES-III Perceived Scale, items 1-20
N=577

	FACES1	FACES2	FACES3	FACES4	FACES5	FACES6
FACES1	1.014830					
FACES2	.190240	.962217				
FACES3	.274001	.116043	.978742			
FACES4	.208742	.555296	.171259	1.252060		
FACES5	.167389	.113156	.187329	.138447	.935310	
FACES6	.175808	.173039	.034373	.243631	.111972	1.638180
FACES7	.199223	.228728	.248690	.247488	.277405	.219641
FACES8	.109622	.157150	.034932	.238284	.050525	.322661
FACES9	.309431	.192683	.312706	.143123	.394726	.137836
FACES10	.191929	.573485	.222816	.888630	.215560	.214423
FACES11	.271763	.119427	.291272	.032401	.205340	.028148
FACES12	.134666	.335311	.072875	.460010	.068171	.253656
FACES13	.231639	.136066	.335645	.136258	.289165	.004487
FACES14	-.053481	.056085	-.122749	.196837	.013644	.285015
FACES15	.247003	.243783	.279151	.197872	.343118	.084450
FACES16	.198404	.213434	.189990	.308420	.146438	.254661
FACES17	.484965	.127898	.370071	.242049	.315804	.316038
FACES18	-.060351	-.019026	-.101512	.049420	-.014895	.259873
FACES19	.155856	.106431	.191140	.067397	.192573	-.024934
FACES20	.013001	.039282	-.081796	.077896	-.007435	.206480

Table 11

Variance-Covariance matrix for FACES-III Perceived Scale, items 1-20
N=577

	FACES7	FACES8	FACES9	FACES10	FACES11	FACES12
FACES7	1.244170					
FACES8	.124467	.971314				
FACES9	.393947	.134228	1.081090			
FACES10	.248546	.164870	.312725	1.723690		
FACES11	.271134	.031891	.454130	.143335	.699379	
FACES12	.068751	.188727	.086099	.449522	.023289	.799092
FACES13	.180839	.060625	.349297	.198881	.313281	.035211
FACES14	-.018361	.272142	-.055954	.082218	-.060176	.197628
FACES15	.255368	.054906	.507026	.358503	.400879	.081093
FACES16	.024227	.343479	.200989	.371763	.113648	.197851
FACES17	.417172	.204341	.464258	.327576	.356207	.107788
FACES18	-.105264	.120610	-.069831	.010874	-.038515	.111228
FACES19	.149712	-.009812	.321322	.139022	.336523	-.036095
FACES20	-.087070	.179505	.005991	.074300	-.011981	.121433
	FACES13	FACES14	FACES15	FACES16	FACES17	FACES18
FACES13	1.086520					
FACES14	-.043344	.954267				
FACES15	.422915	-.074541	1.118070			
FACES16	.177337	.117940	.297751	1.498190		
FACES17	.403435	-.014757	.387505	.483220	1.413980	
FACES18	-.105399	.210087	-.091459	.134621	.008921	1.125500
FACES19	.275912	-.117932	.367315	.125560	.240775	-.120097
FACES20	-.015685	.143269	.061324	.464643	.028274	.417468
	FACES19	FACES20				
FACES19	.547708					
FACES20	-.007321	1.388880				

Table 12

Varaince-covariance matrix for FACES-III Ideal Scale, items 21-40
N=577

	FACES21	FACES22	FACES23	FACES24	FACES25	FACES26
FACES21	.742827					
FACES22	.212942	.883601				
FACES23	.279171	.178787	.914416			
FACES24	.228112	.606202	.266265	1.312930		
FACES25	.118480	.079463	.114352	.176889	.870764	
FACES26	.139151	.248010	.228362	.395001	.209156	1.445890
FACES27	.190039	.164042	.286795	.235289	.254426	.189413
FACES28	.092568	.239227	.078955	.384158	.075453	.371858
FACES29	.224479	.089573	.279427	.158521	.285607	.125878
FACES30	.257700	.483087	.324051	.877785	.158145	.295774
FACES31	.165987	.082534	.219466	.090172	.089483	.032246
FACES32	.072430	.386663	.123402	.552615	.098019	.337063
FACES33	.196713	.103571	.269028	.129845	.215500	.023589
FACES34	-.020860	.134698	-.105075	.185199	.067462	.289612
FACES35	.182665	.086442	.273129	.135898	.179132	.091436
FACES36	.156662	.308885	.161209	.409454	.091912	.389570
FACES37	.329399	.123342	.373535	.240589	.135863	.185835
FACES38	.199707	.108392	.228276	.105195	.129439	-.085798
FACES39	.133476	.055938	.162888	.051176	.040767	.031795
FACES40	.167885	.157941	.152001	.168008	.228117	.019192

Table 12 (continued)

Varaince-covariance matrix for FACES-III Ideal Scale, items 21-40
N=577

	FACES27	FACES28	FACES29	FACES30	FACES31	FACES32
FACES27	.942741					
FACES28	.148457	1.217780				
FACES29	.277754	.110308	.690358			
FACES30	.232455	.377263	.304073	1.440780		
FACES31	.211225	.066339	.201338	.141879	.308011	
FACES32	.063598	.304157	.058981	.401053	.008752	.879948
FACES33	.296078	.111192	.275675	.216785	.238106	-.024085
FACES34	.039500	.327003	-.036145	.142098	-.046270	.155817
FACES35	.272903	.043048	.342718	.256487	.219677	.017606
FACES36	.131935	.534638	.134318	.456527	.089174	.240269
FACES37	.284643	.133139	.333078	.312636	.217603	.099954
FACES38	.244491	.136985	.120074	.136113	.151262	.068951
FACES39	.136410	.076976	.150320	.122637	.154454	.030882
FACES40	.189501	.172031	.201196	.259864	.115146	.088695
	FACES33	FACES34	FACES35	FACES36	FACES37	FACES38
FACES33	.677511					
FACES34	-.050398	.965663				
FACES35	.342333	-.056425	.606116			
FACES36	.169567	.264006	.205559	1.410830		
FACES37	.295569	-.007565	.335643	.310334	.948773	
FACES38	.232340	-.047271	.182495	.081824	.244766	1.417680
FACES39	.160107	-.052839	.164533	.114313	.185318	.184241
FACES40	.141191	.012183	.198852	.248192	.251242	.611274
	FACES39	FACES40				
FACES39	.286732					
FACES40	.120791	1.484760				

Table 13

Variance-covariance matrix for FACES-III, all items, N=922

	FACES1	FACES2	FACES3	FACES4	FACES5	FACES6
FACES1	1.020780					
FACES2	.196998	.948118				
FACES3	.269288	.111588	.998915			
FACES4	.180222	.506311	.171031	1.210290		
FACES5	.200677	.114519	.212778	.134959	.963077	
FACES6	.137140	.125414	.064092	.228138	.070677	1.570190
FACES7	.255282	.161209	.245376	.174816	.289049	.199210
FACES8	.096165	.135914	.039091	.242020	.053957	.301456
FACES9	.340744	.137694	.319221	.150166	.391263	.107972
FACES10	.223054	.524170	.271881	.827115	.208670	.146162
FACES11	.284898	.127978	.301838	.072578	.195960	.050393
FACES12	.099817	.272261	.078089	.416433	.057438	.216461
FACES13	.286466	.153356	.319152	.132844	.317395	.031391
FACES14	-.022934	.071456	-.063355	.185521	-.016650	.277786
FACES15	.321449	.219532	.283359	.204624	.332851	.098494
FACES16	.195604	.175256	.180257	.327095	.091272	.254918
FACES17	.479149	.089065	.369179	.247676	.285089	.277590
FACES18	-.063299	-.004780	-.074673	.038465	-.028177	.290030
FACES19	.187770	.086513	.171550	.072283	.197194	-.001200
FACES20	-.029582	.037221	-.061858	.123458	-.052464	.182375
FACES21	.368531	.082408	.100962	.088060	.168726	.072659
FACES22	.112488	.356088	.085785	.358204	.087211	.167516
FACES23	.212351	.031295	.422376	.111445	.181275	.086170
FACES24	.095569	.207308	.099938	.643747	.076125	.253564
FACES25	.093110	.082168	.092272	.084259	.430542	.142172
FACES26	.102301	.078172	.150352	.171031	.121160	.811779
FACES27	.156496	.064164	.188926	.080694	.247166	.107422
FACES28	-.096633	.074911	-.060782	.158182	-.003922	.201951
FACES29	.166576	.026946	.160679	.028679	.194785	.088946
FACES30	.123190	.211768	.142296	.480375	.105650	.082874
FACES31	.136446	.025831	.149840	.019394	.115731	.007249
FACES32	.009744	.158417	.057578	.318727	-.037335	.207479
FACES33	.169062	.024944	.131373	.019755	.164207	-.002226
FACES34	-.110815	.059145	-.110381	.122487	-.052205	.197210
FACES35	.140785	.109556	.150915	.095940	.174666	.079238
FACES36	.065118	.112582	.002206	.181700	.034382	.148586
FACES37	.254126	.009335	.200753	.057032	.183531	.120374
FACES38	.118548	.035151	.059570	.025554	.165846	-.086788
FACES39	.112699	.002775	.114010	.018784	.086328	-.001179
FACES40	-.001723	-.026310	-.000026	.039372	.101712	-.018218

Table 13 (continued)

Variance-covariance matrix for FACES-III, all items, N=922

	FACES7	FACES8	FACES9	FACES10	FACES11	FACES12
FACES7	1.260660					
FACES8	.112906	.932274				
FACES9	.409673	.138565	1.079760			
FACES10	.200337	.173515	.312740	1.696380		
FACES11	.307541	.058123	.460680	.198602	.743595	
FACES12	.033726	.161320	.081528	.381106	.046410	.740319
FACES13	.288402	.076500	.391800	.217882	.345350	.020055
FACES14	-.003114	.283821	-.048671	.086953	-.062801	.156558
FACES15	.316384	.098914	.561883	.342545	.446716	.070380
FACES16	-.002365	.353693	.200971	.339306	.134101	.137179
FACES17	.382774	.162049	.445404	.348611	.331140	.103825
FACES18	-.015379	.102918	-.048600	-.014076	-.017213	.064559
FACES19	.218488	.041210	.323411	.193540	.336356	-.031616
FACES20	-.085456	.212826	-.051764	.120681	-.007068	.119953
FACES21	.169755	.094090	.230653	.130271	.153374	.032049
FACES22	.054396	.157687	.082599	.299916	.039721	.218938
FACES23	.233789	.048707	.214414	.161503	.156738	.070960
FACES24	.118090	.200360	.064034	.466018	.001814	.295988
FACES25	.196695	.076956	.252887	.116882	.070405	.074183
FACES26	.131922	.265932	.158342	.068529	.018520	.194612
FACES27	.426574	.076087	.198586	.144252	.121274	.050829
FACES28	-.109660	.270629	-.009515	.042128	-.067793	.118731
FACES29	.203414	.041973	.353346	.121878	.143602	.046870
FACES30	.066004	.154302	.168157	.711007	.052183	.240101
FACES31	.152420	.002855	.170170	.080141	.188956	.007131
FACES32	-.011491	.118613	.011538	.218024	-.022027	.400134
FACES33	.160803	-.011932	.169676	.048003	.129470	-.024397
FACES34	-.036519	.188029	.013924	.027772	-.044135	.114705
FACES35	.233647	.043193	.274183	.131739	.179603	.009549
FACES36	-.031500	.196851	.078701	.063140	-.008387	.091055
FACES37	.204676	.081007	.266190	.157281	.178420	.047163
FACES38	.193497	.051668	.048913	.036283	.036363	-.025573
FACES39	.129276	.023732	.147037	.045307	.138010	-.003303
FACES40	.063143	-.001293	.049107	.076310	.021328	.052490

Table 13 (continued)

Variance-covariance matrix for FACES-III, all items, N=922

	FACES13	FACES14	FACES15	FACES16	FACES17	FACES18
FACES13	1.178090					
FACES14	-.029668	.932314				
FACES15	.494025	-.044231	1.178370			
FACES16	.192999	.143849	.279089	1.537970		
FACES17	.371718	.016139	.381246	.386368	1.412830	
FACES18	-.075078	.185469	-.087744	.160724	.052620	1.213440
FACES19	.309164	-.054913	.386280	.129103	.252213	-.076910
FACES20	-.013880	.155320	.010000	.430003	.051466	.425956
FACES21	.183039	-.030875	.169518	.085270	.303907	-.063262
FACES22	.124700	.096928	.119726	.156316	.153496	-.005448
FACES23	.198048	-.004106	.218119	.097446	.349628	-.048943
FACES24	.110048	.112226	.087489	.199804	.224409	.023148
FACES25	.228446	.039137	.180783	.090842	.200059	.008017
FACES26	.093739	.174967	.110865	.253071	.242237	.309285
FACES27	.243640	.000621	.156418	.140268	.193474	-.028665
FACES28	-.035752	.186404	-.082302	.147364	-.038725	.165890
FACES29	.198240	.005694	.214035	.085270	.228989	-.038061
FACES30	.140969	.058582	.190582	.178013	.233092	.004409
FACES31	.191352	-.025347	.169928	.046922	.153750	-.050410
FACES32	-.010834	.113652	-.009088	.109589	.040563	.122051
FACES33	.387999	-.031920	.187849	.065430	.208705	-.081528
FACES34	-.053803	.397030	-.045114	.093964	-.050510	.143777
FACES35	.245538	-.007037	.335097	.094320	.206997	-.068022
FACES36	.064138	.188697	.029142	.427712	.099602	.177647
FACES37	.224511	-.012222	.147735	.089844	.467745	.046022
FACES38	.165965	.027140	.087614	-.013557	.107382	-.339724
FACES39	.100513	-.042942	.111493	.039148	.105140	-.045656
FACES40	.124347	.013536	.078444	.055578	.009705	-.173165

Table 13 (continued)

Variance-covariance matrix for FACES-III, all items, N=922

	FACES19	FACES20	FACES21	FACES22	FACES23	FACES24
FACES19	.563352					
FACES20	-.018256	1.399970				
FACES21	.108492	-.035341	.715836			
FACES22	.070222	.122097	.211763	.900321		
FACES23	.083944	-.106658	.245145	.174643	.856331	
FACES24	.032250	.162990	.223361	.573350	.215392	1.296870
FACES25	.087652	.025988	.150069	.117379	.154946	.144257
FACES26	-.002848	.161391	.119833	.284502	.204930	.390203
FACES27	.091482	-.065846	.216575	.116723	.293680	.195196
FACES28	-.050588	.141179	.081232	.209701	.058326	.352295
FACES29	.126950	-.058142	.214208	.096442	.244059	.130593
FACES30	.078457	.093962	.209321	.469459	.279614	.821206
FACES31	.136464	-.031700	.153243	.072360	.224881	.090970
FACES32	-.032710	.140382	.064111	.346644	.113684	.516793
FACES33	.143672	-.077655	.197839	.140483	.261281	.129346
FACES34	-.021687	.098819	-.017224	.148611	-.074938	.183432
FACES35	.161990	-.038527	.204204	.113927	.271524	.145076
FACES36	.019860	.144008	.164362	.271231	.132097	.336821
FACES37	.131848	-.005665	.336898	.160759	.342625	.222647
FACES38	.079586	-.072666	.162012	.116353	.180033	.110458
FACES39	.141637	-.014254	.124361	.061117	.162381	.069436
FACES40	.047156	-.062798	.148986	.132581	.160410	.113602
	FACES25	FACES26	FACES27	FACES28	FACES29	FACES30
FACES25	.923038					
FACES26	.193606	1.451640				
FACES27	.321521	.150907	.972032			
FACES28	.091480	.371919	.144030	1.204120		
FACES29	.294477	.113904	.279550	.101862	.678920	
FACES30	.149929	.244573	.196608	.311671	.257540	1.503170
FACES31	.127964	.022893	.259350	.057826	.206451	.152474
FACES32	.094662	.352699	.047105	.272594	.039041	.409320
FACES33	.221982	.021738	.314292	.082000	.273843	.208948
FACES34	.048621	.301057	.016689	.356889	-.021567	.129890
FACES35	.225945	.088094	.315250	.059242	.312781	.251575
FACES36	.099352	.371185	.151121	.489249	.133960	.396935
FACES37	.198663	.156392	.332233	.108447	.315421	.333962
FACES38	.084528	-.119278	.232221	.086853	.101078	.088631
FACES39	.090354	.012074	.202591	.074065	.159106	.133242
FACES40	.173132	-.047521	.179098	.122821	.194588	.227434

Table 13 (continued)

Variance-covariance matrix for FACES-III, all items, N=922

	FACES31	FACES32	FACES33	FACES34	FACES35	FACES36
FACES31	.345889					
FACES32	.017347	.888386				
FACES33	.252809	.015184	.697140			
FACES34	-.041677	.198895	-.046203	1.022000		
FACES35	.243525	.028081	.348277	-.027094	.624295	
FACES36	.099359	.250694	.186782	.324766	.200732	1.380580
FACES37	.224410	.085960	.279007	.015526	.319679	.297830
FACES38	.174257	.012797	.240632	-.011780	.184975	.066057
FACES39	.202115	.023003	.197857	-.036801	.195788	.106467
FACES40	.146431	.060633	.197758	.023156	.206038	.260306
	FACES37	FACES38	FACES39	FACES40		
FACES37	.957245					
FACES38	.216064	1.557960				
FACES39	.200587	.209813	.324547			
FACES40	.243481	.649386	.156037	1.478950		

Appendix B

Family Support Scale

Table 1

Descriptive Statistics for FSS, N=345

VARIABLE	MEAN	ST. DEV.	SKEWNESS	KURTOSIS	MINIMUM	FREQ.	MAXIMUM	FREQ.
FSS1	2.544	1.255	-.434	-.878	.000	24	4.000	102
FSS2	1.787	1.349	.177	-1.059	.000	82	4.000	51
FSS3	1.891	1.195	.109	-.846	.000	47	4.000	37
FSS4	1.407	1.159	.526	-.399	.000	93	4.000	22
FSS5	2.737	1.384	-.814	-.627	.000	41	4.000	142
FSS6	1.957	1.204	.083	-.890	.000	42	4.000	42
FSS7	1.286	1.262	.684	-.567	.000	125	4.000	26
FSS8	2.277	1.166	-.261	-.584	.000	31	4.000	60
FSS9	1.526	1.145	.474	-.371	.000	74	4.000	25
FSS10	1.510	1.188	.413	-.626	.000	85	4.000	24
FSS11	1.021	1.066	1.198	1.007	.000	123	4.000	16
FSS12	1.107	1.077	.942	.395	.000	119	4.000	14
FSS13	1.285	1.164	.850	.064	.000	101	4.000	25
FSS14	2.342	1.178	-.334	-.701	.000	28	4.000	62
FSS15	2.853	1.127	-.902	.110	.000	17	4.000	117
FSS16	2.362	1.223	-.634	-.280	.000	50	4.000	63
FSS17	1.738	1.200	.232	-.635	.000	67	4.000	35
FSS18	2.575	1.296	-.815	-.267	.000	49	4.000	96

Table 2
Descriptive Statistics for FSS, N=577

VARIABLE	MEAN	ST. DEV.	SKEWNESS	KURTOSIS	MINIMUM	FREQ.	MAXIMUM	FREQ.
FSS1	2.632	1.280	-.575	-.786	.000	44	4.000	193
FSS2	1.912	1.324	.102	-1.039	.000	109	4.000	94
FSS3	2.021	1.175	-.045	-.785	.000	68	4.000	67
FSS4	1.571	1.225	.407	-.686	.000	137	4.000	52
FSS5	2.947	1.266	-.995	-.160	.000	40	4.000	275
FSS6	2.038	1.119	-.054	-.713	.000	54	4.000	57
FSS7	1.349	1.153	.590	-.402	.000	163	4.000	32
FSS8	2.290	1.192	-.392	-.525	.000	65	4.000	100
FSS9	1.475	1.024	.327	-.257	.000	115	4.000	19
FSS10	1.604	1.209	.269	-.784	.000	138	4.000	43
FSS11	1.017	.938	1.110	1.280	.000	174	4.000	14
FSS12	1.207	1.007	.823	.445	.000	150	4.000	19
FSS13	1.221	1.004	.907	.870	.000	147	4.000	25
FSS14	2.358	1.185	-.331	-.691	.000	48	4.000	111
FSS15	2.886	1.124	-1.032	.525	.000	36	4.000	202
FSS16	2.219	1.312	-.411	-.741	.000	107	4.000	114
FSS17	1.719	1.182	.293	-.408	.000	114	4.000	64
FSS18	2.555	1.295	-.730	-.358	.000	79	4.000	168

Table 3
Descriptive Statistics for FSS, N=922

VARIABLE	MEAN	ST. DEV.	SKEWNESS	KURTOSIS	MINIMUM	FREQ.	MAXIMUM	FREQ.
FSS1	2.599	1.271	-.521	-.832	.000	68	4.000	295
FSS2	1.866	1.334	.127	-1.053	.000	191	4.000	145
FSS3	1.972	1.183	.012	-.824	.000	115	4.000	104
FSS4	1.509	1.203	.454	-.592	.000	230	4.000	74
FSS5	2.868	1.314	-.929	-.346	.000	81	4.000	417
FSS6	2.008	1.151	-.003	-.793	.000	96	4.000	99
FSS7	1.325	1.195	.625	-.477	.000	288	4.000	58
FSS8	2.285	1.182	-.344	-.552	.000	96	4.000	160
FSS9	1.494	1.071	.403	-.272	.000	189	4.000	44
FSS10	1.569	1.202	.322	-.739	.000	223	4.000	67
FSS11	1.018	.987	1.157	1.202	.000	297	4.000	30
FSS12	1.169	1.035	.861	.401	.000	269	4.000	33
FSS13	1.245	1.066	.896	.537	.000	248	4.000	50
FSS14	2.352	1.182	-.331	-.700	.000	76	4.000	173
FSS15	2.874	1.125	-.982	.358	.000	53	4.000	319
FSS16	2.272	1.281	-.492	-.601	.000	157	4.000	177
FSS17	1.726	1.188	.270	-.502	.000	181	4.000	99
FSS18	2.563	1.295	-.761	-.331	.000	128	4.000	264

Table 4

Variance-covariance matrix for the FSS, N=345

	FSS1	FSS2	FSS3	FSS4	FSS5	FSS6
FSS1	1.575730					
FSS2	.386194	1.819700				
FSS3	.669201	.421382	1.427130			
FSS4	.305523	1.046270	.625034	1.343820		
FSS5	.176872	.738196	.147183	.526467	1.914250	
FSS6	.337089	.393591	.483301	.430878	.399489	1.448700
FSS7	.169226	.637753	.326951	.609034	.800177	.983242
FSS8	.137618	.111051	.278279	.168393	.445568	.301473
FSS9	.357812	.325049	.422148	.276325	.430721	.741323
FSS10	.272979	.270443	.205605	.185657	.292816	.422937
FSS11	.235857	.399809	.317681	.324616	.222972	.396349
FSS12	.295598	.305940	.380569	.330024	.365132	.502175
FSS13	.274826	.406510	.281639	.369103	.449500	.414210
FSS14	.455971	.481371	.417269	.309447	.462377	.445691
FSS15	.273830	.390675	.394097	.285849	.489728	.450160
FSS16	.162911	.030164	.159199	.010187	.165183	.350775
FSS17	.298690	.285853	.331391	.314695	.218139	.345532
FSS18	.206645	.278009	.319158	.205478	.306901	.403118
	FSS7	FSS8	FSS9	FSS10	FSS11	FSS12
FSS7	1.593010					
FSS8	.350670	1.358550				
FSS9	.678524	.335874	1.311120			
FSS10	.414714	.291856	.444380	1.411960		
FSS11	.435873	.309201	.506588	.560390	1.136320	
FSS12	.467177	.281987	.557511	.349162	.472863	1.159680
FSS13	.460003	.308641	.624536	.474255	.752076	.555557
FSS14	.478480	.385133	.495120	.393320	.390104	.423325
FSS15	.532549	.351118	.510483	.248353	.360743	.359942
FSS16	.224841	.148832	.330106	.355708	.248397	.312690
FSS17	.344366	.228178	.474269	.377341	.360331	.302950
FSS18	.310752	.191198	.482304	.400798	.309938	.374389
	FSS13	FSS14	FSS15	FSS16	FSS17	FSS18
FSS13	1.355440					
FSS14	.365729	1.388830				
FSS15	.482535	.494389	1.269980			
FSS16	.221395	.153655	.507403	1.494540		
FSS17	.243137	.371148	.565663	.334548	1.441060	
FSS18	.602684	.352702	.631639	.488596	.464030	1.680190

Table 5

Variance-covariance matrix for FSS, N=577

	FSS1	FSS2	FSS3	FSS4	FSS5	FSS6
FSS1	1.638380					
FSS2	.354793	1.751820				
FSS3	.722552	.384310	1.379820			
FSS4	.192095	.964327	.564679	1.501090		
FSS5	-.026644	.652208	.094087	.549251	1.602050	
FSS6	.356383	.268882	.490943	.299192	.196326	1.252000
FSS7	.247848	.592873	.378480	.602904	.616595	.738309
FSS8	.128494	.272585	.180831	.159894	.361518	.276235
FSS9	.245961	.317924	.401053	.335818	.212138	.505293
FSS10	.247424	.409265	.285231	.360424	.269035	.468423
FSS11	.204221	.289355	.220780	.276345	.217354	.269020
FSS12	.292975	.311314	.340364	.351812	.189042	.388852
FSS13	.261198	.294100	.311080	.232001	.206998	.268689
FSS14	.336863	.298446	.360341	.322248	.205718	.368840
FSS15	.177940	.090448	.133309	.144125	.268696	.156496
FSS16	.191871	.097371	.178964	.097899	.326471	.229280
FSS17	.161947	.109805	.261685	.207207	.065954	.173914
FSS18	.109295	.027953	.085928	.100983	.292540	.135936
	FSS7	FSS8	FSS9	FSS10	FSS11	FSS12
FSS7	1.330210					
FSS8	.296405	1.420790				
FSS9	.526562	.248327	1.048420			
FSS10	.409608	.271635	.466955	1.462290		
FSS11	.309690	.156366	.370671	.556566	.880092	
FSS12	.403250	.143714	.419016	.421039	.424271	1.015030
FSS13	.335959	.168665	.387768	.489527	.469256	.437024
FSS14	.364640	.171345	.361428	.445363	.364684	.357857
FSS15	.186121	.246133	.205133	.359751	.237751	.222553
FSS16	.200305	.347658	.268433	.410237	.306802	.345798
FSS17	.153686	.148487	.212066	.396518	.361883	.298458
FSS18	.156155	.224159	.182083	.400108	.257471	.297450

Table 5 (continued)

Variance-covariance matrix for FSS, N=577

	FSS13	FSS14	FSS15	FSS16	FSS17	FSS18
FSS13	1.007040					
FSS14	.353994	1.404490				
FSS15	.243048	.475599	1.263060			
FSS16	.405889	.328339	.532935	1.722450		
FSS17	.349227	.404886	.482928	.347252	1.397530	
FSS18	.368081	.266646	.754227	.605335	.553118	1.676830

Table 6

Variance-covariance matrix for FSS, N=922

	FSS1	FSS2	FSS3	FSS4	FSS5	FSS6
FSS1	1.614980					
FSS2	.368701	1.778960				
FSS3	.704482	.401541	1.399910			
FSS4	.237595	.998696	.591565	1.446990		
FSS5	.053690	.689790	.120175	.548191	1.727240	
FSS6	.350460	.317574	.490032	.351186	.276017	1.325670
FSS7	.219497	.610841	.360726	.606948	.687586	.830195
FSS8	.132036	.212349	.217439	.163409	.393179	.285619
FSS9	.286423	.318732	.406943	.311266	.291028	.591921
FSS10	.258607	.359713	.258007	.298332	.282214	.452712
FSS11	.215724	.330165	.256599	.293904	.218998	.316201
FSS12	.295680	.311909	.358040	.347125	.259526	.432672
FSS13	.264701	.333890	.297812	.280512	.294211	.321528
FSS14	.381316	.366922	.381703	.317737	.302154	.397454
FSS15	.214249	.203475	.231589	.198192	.352615	.266656
FSS16	.177929	.067965	.167062	.059559	.258852	.271676
FSS17	.212445	.174865	.286843	.246379	.121760	.237450
FSS18	.145139	.120747	.172357	.139155	.296627	.235210
	FSS7	FSS8	FSS9	FSS10	FSS11	FSS12
FSS7	1.427850					
FSS8	.316549	1.396050				
FSS9	.581994	.280596	1.146020			
FSS10	.412444	.279186	.456895	1.443940		
FSS11	.356419	.213267	.421088	.557293	.974843	
FSS12	.428162	.195518	.469088	.395921	.441855	1.070300
FSS13	.380986	.220563	.476548	.481896	.574449	.479327
FSS14	.407002	.251061	.410776	.425795	.373766	.382301
FSS15	.315807	.285184	.318557	.318487	.283396	.274415
FSS16	.207149	.272569	.292892	.386304	.284803	.329712
FSS17	.224451	.178029	.310006	.388497	.360931	.299353
FSS18	.213442	.211543	.294254	.399505	.276809	.325407
	FSS13	FSS14	FSS15	FSS16	FSS17	FSS18
FSS13	1.137030					
FSS14	.357750	1.397180				
FSS15	.331732	.482228	1.264540			
FSS16	.338673	.262195	.521695	1.640230		
FSS17	.309516	.391771	.513152	.342785	1.412360	
FSS18	.455599	.298425	.707467	.561727	.519332	1.676360

Appendix C
Family Resource Scale

Table 1

Descriptive Statistics for FRS, items 1-30

VARIABLE	MEAN	ST. DEV.	SKEWNESS	KURTOSIS	MINIMUM FREQ.		MAXIMUM FREQ.	
FRS1	4.755	.641	-3.517	14.546	1.000	4	5.000	284
FRS2	4.725	.695	-3.326	12.472	1.000	5	5.000	278
FRS3	4.064	1.071	-.941	.092	1.000	9	5.000	161
FRS4	4.330	.959	-1.459	1.592	1.000	6	5.000	202
FRS5	4.674	.702	-2.793	9.173	1.000	4	5.000	263
FRS6	4.800	.548	-3.920	20.054	1.000	3	5.000	290
FRS7	4.050	1.054	-.999	.424	1.000	11	5.000	151
FRS8	4.063	1.263	-1.276	.504	1.000	29	5.000	180
FRS9	4.236	1.127	-1.640	1.876	1.000	20	5.000	193
FRS10	4.092	1.006	-1.655	2.545	1.000	17	5.000	115
FRS11	4.263	1.090	-1.643	2.001	1.000	17	5.000	195
FRS12	3.794	1.124	-.723	-.220	1.000	15	5.000	112
FRS13	4.505	.862	-2.108	4.507	1.000	6	5.000	230
FRS14	2.960	1.248	.130	-.917	1.000	46	5.000	52
FRS15	3.835	1.025	-.625	-.188	1.000	8	5.000	106
FRS16	4.231	.877	-1.122	1.005	1.000	3	5.000	159
FRS17	3.237	1.190	-.178	-.746	1.000	32	5.000	60
FRS18	4.588	.991	-2.665	6.127	1.000	15	5.000	270
FRS19	3.659	1.219	-.680	-.406	1.000	27	5.000	105
FRS20	3.913	1.119	-1.329	1.225	1.000	26	5.000	108
FRS21	3.698	1.178	-.699	-.296	1.000	22	5.000	105
FRS22	3.886	1.343	-1.065	-.095	1.000	39	5.000	156
FRS23	3.831	1.157	-.857	.030	1.000	21	5.000	122
FRS24	3.239	1.198	-.125	-.840	1.000	29	5.000	63
FRS25	3.244	1.217	-.176	-.871	1.000	32	5.000	63
FRS26	4.313	.953	-1.413	1.523	1.000	6	5.000	196
FRS27	3.215	1.340	-.151	-1.110	1.000	46	5.000	80
FRS28	3.323	1.221	-.263	-.824	1.000	31	5.000	70
FRS29	2.426	1.346	.587	-.783	1.000	117	5.000	41
FRS30	2.391	1.347	.642	-.715	1.000	121	5.000	41

n=345

Table 2
Descriptive Statistics for the FRS

VARIABLE	MEAN	ST. DEV.	SKEWNESS	KURTOSIS	MINIMUM	FREQ.	MAXIMUM	FREQ.
FRSA1	4.769	.617	-3.531	14.609	1.000	5	5.000	479
FRSA2	4.761	.674	-3.489	13.057	1.000	6	5.000	486
FRSA3	4.144	1.027	-1.035	.264	1.000	10	5.000	284
FRSA4	4.421	.881	-1.511	1.660	1.000	4	5.000	362
FRSA5	4.767	.589	-3.199	12.184	1.000	3	5.000	474
FRSA6	4.838	.531	-4.518	24.086	1.000	4	5.000	500
FRSA7	4.136	1.039	-1.197	.828	1.000	16	5.000	272
FRSA8	4.243	1.179	-1.678	1.820	1.000	42	5.000	340
FRSA9	4.385	1.003	-1.875	3.112	1.000	22	5.000	364
FRSA10	4.164	.878	-2.081	5.125	1.000	24	5.000	170
FRSA11	4.456	.975	-2.021	3.552	1.000	17	5.000	392
FRSA12	3.787	1.081	-.628	-.321	1.000	18	5.000	178
FRSA13	4.560	.803	-2.153	4.722	1.000	6	5.000	400
FRSA14	3.114	1.232	-.068	-.932	1.000	65	5.000	92
FRSA15	3.920	.988	-.771	.208	1.000	13	5.000	187
FRSA16	4.190	.928	-1.224	1.390	1.000	11	5.000	260
FRSA17	3.406	1.144	-.305	-.707	1.000	34	5.000	111
FRSA18	4.700	.812	-3.181	10.035	1.000	14	5.000	480
FRSA19	3.833	1.188	-.870	-.119	1.000	35	5.000	211
FRSA20	4.036	1.104	-1.536	1.866	1.000	42	5.000	216
FRSA21	3.678	1.194	-.650	-.444	1.000	37	5.000	177
FRSA22	4.004	1.231	-1.122	.221	1.000	40	5.000	279
FRSA23	3.987	1.079	-.872	.013	1.000	17	5.000	241
FRSA24	3.294	1.185	-.240	-.751	1.000	49	5.000	104
FRSA25	3.308	1.215	-.317	-.789	1.000	56	5.000	106
FRSA26	4.354	.889	-1.518	2.162	1.000	8	5.000	322
FRSA27	3.309	1.244	-.211	-.901	1.000	54	5.000	126
FRSA28	3.359	1.220	-.246	-.830	1.000	48	5.000	129
FRSA29	2.598	1.361	.400	-1.018	1.000	162	5.000	76
FRSA30	2.539	1.324	.423	-.920	1.000	170	5.000	64

n=577

Table 3
Descriptive Statistics for FRS, items 1-30

VARIABLE	MEAN	ST. DEV.	SKEWNESS	KURTOSIS	MINIMUM	FREQ.	MAXIMUM	FREQ.
FRS1	4.764	.626	-3.522	14.571	1.000	9	5.000	763
FRS2	4.747	.682	-3.419	12.789	1.000	11	5.000	764
FRS3	4.114	1.044	-.999	.192	1.000	19	5.000	445
FRS4	4.387	.911	-1.497	1.674	1.000	10	5.000	564
FRS5	4.732	.635	-3.038	10.977	1.000	7	5.000	737
FRS6	4.824	.537	-4.271	22.357	1.000	7	5.000	790
FRS7	4.103	1.045	-1.119	.650	1.000	27	5.000	423
FRS8	4.176	1.213	-1.511	1.224	1.000	71	5.000	520
FRS9	4.329	1.053	-1.784	2.598	1.000	42	5.000	557
FRS10	4.137	.928	-1.900	3.940	1.000	41	5.000	285
FRS11	4.384	1.023	-1.861	2.856	1.000	34	5.000	587
FRS12	3.789	1.096	-.665	-.283	1.000	33	5.000	290
FRS13	4.539	.826	-2.138	4.662	1.000	12	5.000	630
FRS14	3.057	1.240	.005	-.947	1.000	111	5.000	144
FRS15	3.888	1.002	-.714	.037	1.000	21	5.000	293
FRS16	4.205	.909	-1.192	1.282	1.000	14	5.000	419
FRS17	3.343	1.164	-.260	-.730	1.000	66	5.000	171
FRS18	4.658	.884	-2.970	8.303	1.000	29	5.000	750
FRS19	3.768	1.202	-.794	-.253	1.000	62	5.000	316
FRS20	3.990	1.111	-1.450	1.584	1.000	68	5.000	324
FRS21	3.685	1.188	-.667	-.396	1.000	59	5.000	282
FRS22	3.960	1.275	-1.106	.111	1.000	79	5.000	435
FRS23	3.929	1.111	-.874	.049	1.000	38	5.000	363
FRS24	3.273	1.189	-.196	-.794	1.000	78	5.000	167
FRS25	3.284	1.216	-.263	-.831	1.000	88	5.000	169
FRS26	4.339	.913	-1.477	1.899	1.000	14	5.000	518
FRS27	3.274	1.281	-.193	-.987	1.000	100	5.000	206
FRS28	3.345	1.219	-.252	-.832	1.000	79	5.000	199
FRS29	2.534	1.357	.467	-.950	1.000	279	5.000	117
FRS30	2.484	1.334	.502	-.865	1.000	291	5.000	105

n=922

Table 4

Variance-covariance matrix for FRS, N=345

	FRS1	FRS2	FRS3	FRS4	FRS5	FRS6
FRS1	.411130					
FRS2	.169208	.482817				
FRS3	.227172	.170292	1.147080			
FRS4	.228707	.187862	.632937	.919565		
FRS5	.193146	.234325	.332693	.317404	.492543	
FRS6	.110646	.096759	.163985	.148332	.164193	.299886
FRS7	.238290	.184588	.744195	.559060	.311958	.227998
FRS8	.194827	.200925	.561570	.435027	.292168	.245839
FRS9	.136927	.175500	.567309	.471305	.257319	.174180
FRS10	.091292	.036120	.377572	.243251	.154907	.083679
FRS11	.214718	.182597	.477238	.390513	.204176	.186338
FRS12	.164899	.203796	.353896	.313160	.257891	.089898
FRS13	.155194	.209171	.378951	.449064	.239808	.194215
FRS14	.083535	.049805	.409015	.417519	.112331	.072672
FRS15	.137449	.096156	.144287	.203008	.164757	.065122
FRS16	.082763	.068704	.198630	.176826	.171320	.074382
FRS17	.089849	.073170	.353160	.327578	.169061	.016542
FRS18	.200493	.076209	.403460	.231747	.250351	.150354
FRS19	.099525	.022797	.346275	.346799	.163022	.064890
FRS20	.136328	.082486	.302126	.266413	.211313	.085579
FRS21	.188502	.206963	.760362	.563463	.282092	.197700
FRS22	.168579	.248634	.774948	.586762	.278459	.167304
FRS23	.169415	.117954	.427715	.376408	.232622	.065911
FRS24	.157608	.122789	.502749	.453756	.178311	.060583
FRS25	.146047	.119361	.294578	.359208	.197313	.082818
FRS26	.145250	.118348	.471259	.506724	.219476	.139515
FRS27	.190920	.236046	.896668	.688165	.322782	.128083
FRS28	.192874	.260748	.817380	.667276	.318331	.166648
FRS29	.145555	.190874	.720369	.513030	.223042	.090838
FRS30	.130167	.189477	.637068	.482068	.220574	.097548

Table 4 (continued)

Variance-covariance matrix for FRS, N=345

	FRS7	FRS8	FRS9	FRS10	FRS11	FRS12
FRS7	1.110940					
FRS8	.616980	1.594140				
FRS9	.574880	.596800	1.271130			
FRS10	.351699	.296701	.563289	1.011190		
FRS11	.497765	.627539	.543061	.274000	1.187640	
FRS12	.458284	.345796	.364659	.265330	.390637	1.262630
FRS13	.407021	.395893	.337255	.158765	.476364	.302460
FRS14	.453049	.304059	.298016	.241345	.306794	.654290
FRS15	.249540	.138300	.122371	.144247	.115586	.496036
FRS16	.266103	.177953	.177735	.159378	.141270	.269265
FRS17	.408065	.174867	.278461	.210983	.262745	.624568
FRS18	.297242	.280550	.335109	.200980	.380879	.231177
FRS19	.341048	.295160	.299183	.148540	.311251	.313370
FRS20	.239625	.122779	.248320	.245033	.269817	.257186
FRS21	.663497	.624069	.694696	.481040	.554359	.471789
FRS22	.717954	.538899	1.046430	.703497	.650661	.522970
FRS23	.456813	.334168	.401099	.279702	.412748	.504362
FRS24	.509802	.341617	.333924	.274216	.316162	.631295
FRS25	.411360	.302324	.175762	.237035	.262227	.545975
FRS26	.495685	.310656	.447335	.226593	.404232	.267700
FRS27	.876358	.735847	.637133	.370864	.573265	.566243
FRS28	.786826	.733532	.662423	.435429	.544975	.587855
FRS29	.784389	.692063	.579231	.349924	.538568	.470821
FRS30	.653632	.675677	.548365	.420538	.546219	.467270

Table 4 (continued)

Variance-covariance matrix for FRS, N=345

	FRS13	FRS14	FRS15	FRS16	FRS17	FRS18
FRS13	.743448					
FRS14	.263062	1.556560				
FRS15	.172134	.461037	1.051110			
FRS16	.186786	.288367	.464916	.769476		
FRS17	.239449	.861470	.668042	.393144	1.416400	
FRS18	.191429	.236634	.121452	.108493	.173822	.981169
FRS19	.172280	.514853	.155859	.094447	.436778	.314900
FRS20	.129689	.310732	.052709	.014420	.129407	.355151
FRS21	.474294	.508331	.242280	.263151	.480148	.316845
FRS22	.447615	.500663	.291968	.273142	.511942	.350877
FRS23	.271938	.664555	.414238	.332777	.700553	.276540
FRS24	.251112	.945932	.482366	.264214	.847369	.308232
FRS25	.271857	.773478	.500163	.353356	.808392	.232115
FRS26	.430132	.303448	.156522	.200135	.275607	.242812
FRS27	.517950	.837184	.357560	.238612	.711632	.361456
FRS28	.467238	.704190	.389705	.265201	.615414	.405676
FRS29	.378961	.654085	.267003	.220118	.509412	.266993
FRS30	.345238	.706618	.338094	.215230	.559043	.274749
	FRS19	FRS20	FRS21	FRS22	FRS23	FRS24
FRS19	1.485850					
FRS20	.699956	1.251100				
FRS21	.479713	.399621	1.386960			
FRS22	.367080	.364461	.998841	1.803910		
FRS23	.448187	.348419	.526073	.704937	1.337740	
FRS24	.633182	.281751	.562030	.631398	.829999	1.435210
FRS25	.553193	.249995	.441855	.409817	.651953	.876597
FRS26	.445497	.220878	.598893	.590593	.384220	.395945
FRS27	.614205	.385010	1.002360	1.009350	.736127	.837765
FRS28	.577068	.399569	.965713	.997885	.646971	.771840
FRS29	.533419	.424421	.934877	.868806	.591201	.724412
FRS30	.607450	.497277	.831529	.865338	.606379	.713413

Table 4 (continued)

Variance-covariance matrix for FRS, N=345

	FRS25	FRS26	FRS27	FRS28	FRS29	FRS30
FRS25	1.481080					
FRS26	.363092	.907533				
FRS27	.714577	.659943	1.796760			
FRS28	.575211	.666161	1.348140	1.489880		
FRS29	.596996	.546267	1.279930	1.160160	1.812790	
FRS30	.623477	.519125	1.140080	1.093250	1.307660	1.813760

Table 5

Variance-covariance matrix for FRS, N=577

	FRSA1	FRSA2	FRSA3	FRSA4	FRSA5	FRSA6
FRSA1	.381144					
FRSA2	.111609	.454087				
FRSA3	.219515	.281398	1.053920			
FRSA4	.188153	.200559	.579939	.775455		
FRSA5	.098746	.125218	.252508	.237456	.347273	
FRSA6	.090075	.133522	.181129	.187092	.178015	.281803
FRSA7	.167445	.207765	.700957	.522859	.217687	.140669
FRSA8	.154921	.231730	.623152	.369280	.235072	.170497
FRSA9	.096105	.157506	.453815	.307014	.152886	.116113
FRSA10	.052992	.060903	.105274	.122597	.076586	.039812
FRSA11	.116769	.229228	.506602	.322329	.192634	.135572
FRSA12	.104801	.117397	.381412	.343404	.145560	.080417
FRSA13	.149603	.195061	.409316	.389402	.183552	.154933
FRSA14	.110295	.135692	.481871	.342429	.156029	.104742
FRSA15	.088031	.094230	.256689	.252845	.107695	.074742
FRSA16	.064406	.071902	.172274	.255278	.079093	.069653
FRSA17	.061106	.133660	.358650	.314121	.110292	.079281
FRSA18	.065820	.202686	.222202	.141120	.085315	.113680
FRSA19	.114674	.193782	.439452	.388747	.199053	.139088
FRSA20	.101294	.144597	.381373	.316353	.123854	.086863
FRSA21	.173425	.221290	.792016	.545468	.252248	.162668
FRSA22	.091625	.194470	.553528	.352916	.242508	.135710
FRSA23	.088776	.162389	.423594	.343462	.145214	.131391
FRSA24	.110275	.164379	.482973	.378851	.139779	.097891
FRSA25	.135819	.084809	.361100	.378405	.079324	.073480
FRSA26	.134299	.152244	.441429	.477318	.168211	.146151
FRSA27	.196030	.221877	.791018	.618390	.252903	.162844
FRSA28	.200184	.235908	.805944	.617749	.244974	.189999
FRSA29	.117393	.177522	.718313	.516570	.222821	.100835
FRSA30	.056045	.174481	.635983	.456270	.196879	.095719

Table 5 (continued)

Variance-covariance matrix for FRS, N=577

	FRSA7	FRSA8	FRSA9	FRSA10	FRSA11	FRSA12
FRSA7	1.078860					
FRSA8	.514484	1.389870				
FRSA9	.435840	.534313	1.006810			
FRSA10	.190075	.120291	.187139	.771680		
FRSA11	.378694	.569979	.342820	.064744	.951278	
FRSA12	.388316	.332625	.212937	.163381	.244206	1.168020
FRSA13	.336459	.337322	.284939	.111406	.325501	.248788
FRSA14	.490255	.369227	.277716	.105503	.257779	.748511
FRSA15	.283592	.157402	.191858	.062440	.152759	.540418
FRSA16	.209969	.089113	.212069	.042550	.100189	.399219
FRSA17	.354978	.251872	.176109	.028321	.229697	.656714
FRSA18	.169431	.358425	.230729	.016329	.271350	.124040
FRSA19	.371911	.409599	.318214	.139592	.353233	.416163
FRSA20	.317125	.390111	.289679	.139272	.336682	.335095
FRSA21	.745753	.558369	.471242	.101057	.474799	.430246
FRSA22	.501477	.581354	.684363	.137831	.401469	.333135
FRSA23	.385016	.463204	.241664	.060989	.282650	.404972
FRSA24	.432121	.398626	.263171	.097048	.267747	.756165
FRSA25	.373286	.274515	.268399	.141377	.181366	.666522
FRSA26	.403721	.343302	.254073	.099490	.243345	.336569
FRSA27	.779061	.670706	.522108	.153764	.481587	.536462
FRSA28	.734628	.646146	.504654	.171123	.493826	.488067
FRSA29	.739479	.679056	.513221	.092777	.511410	.486329
FRSA30	.651306	.659337	.491597	.115298	.494993	.500316

Table 5 (continued)

Variance-covariance matrix for FRS, N=577

	FRSA13	FRSA14	FRSA15	FRSA16	FRSA17	FRSA18
FRSA13	.644899					
FRSA14	.303970	1.518130				
FRSA15	.175915	.589304	.976263			
FRSA16	.173440	.392602	.606859	.861636		
FRSA17	.223242	.866899	.650350	.540406	1.309490	
FRSA18	.118285	.179488	.107295	.089463	.114574	.659395
FRSA19	.310715	.579806	.342815	.214107	.543262	.153951
FRSA20	.230710	.417297	.256903	.164105	.329866	.191240
FRSA21	.378262	.629305	.287331	.269190	.519439	.176404
FRSA22	.293257	.404304	.299865	.225223	.339809	.263505
FRSA23	.273717	.598882	.440550	.375411	.626069	.227169
FRSA24	.287033	.971260	.569596	.428531	.935783	.189093
FRSA25	.229256	.789507	.551257	.497751	.821115	.087248
FRSA26	.341052	.323478	.247623	.287334	.333213	.108176
FRSA27	.430719	.743490	.372615	.289616	.654114	.224357
FRSA28	.403550	.702119	.412781	.324080	.583782	.227642
FRSA29	.322725	.676482	.364165	.227994	.571146	.249525
FRSA30	.274382	.663806	.383664	.202900	.529119	.259733
	FRSA19	FRSA20	FRSA21	FRSA22	FRSA23	FRSA24
FRSA19	1.410720					
FRSA20	.690390	1.219220				
FRSA21	.583507	.521836	1.426790			
FRSA22	.489667	.380229	.721132	1.515660		
FRSA23	.480721	.393933	.534487	.341070	1.164800	
FRSA24	.716935	.448867	.641458	.492966	.790601	1.403920
FRSA25	.557168	.371696	.576262	.392336	.672974	.943977
FRSA26	.372165	.219830	.550722	.346398	.354349	.369336
FRSA27	.612466	.413187	.994362	.646624	.606450	.762461
FRSA28	.589014	.445747	.976636	.689760	.551526	.730811
FRSA29	.535002	.446542	.924731	.710998	.508240	.722903
FRSA30	.582971	.478354	.814215	.725548	.471261	.731501

Table 5 (continued)

Variance-covariance matrix for FRS, N=57

	FRSA25	FRSA26	FRSA27	FRSA28	FRSA29	FRSA30
FRSA25	1.476430					
FRSA26	.406809	.790074				
FRSA27	.750044	.631078	1.546870			
FRSA28	.644928	.595495	1.238390	1.487390		
FRSA29	.629486	.405285	1.154090	1.158840	1.851870	
FRSA30	.548241	.384984	.930577	1.003340	1.308880	1.751990

Table 6
Variance-covariance matrix for FRS, N=922

	FRSA1	FRSA2	FRSA3	FRSA4	FRSA5	FRSA6
FRSA1	.391976					
FRSA2	.133122	.464639				
FRSA3	.222400	.240281	1.089080			
FRSA4	.203394	.196378	.600808	.830368		
FRSA5	.134204	.166632	.283928	.269035	.403178	
FRSA6	.097789	.119980	.175573	.173240	.173507	.288607
FRSA7	.194006	.199618	.717954	.537634	.254527	.173917
FRSA8	.170251	.221522	.602862	.397273	.260073	.200100
FRSA9	.111737	.165335	.498511	.371214	.194972	.139036
FRSA10	.067476	.052198	.208218	.169061	.107325	.056811
FRSA11	.153859	.213214	.498697	.351538	.200927	.156143
FRSA12	.127112	.149482	.370593	.331590	.187211	.083809
FRSA13	.151710	.200592	.398565	.412435	.205565	.169940
FRSA14	.100688	.104792	.457037	.373390	.142903	.094061
FRSA15	.106673	.095579	.216029	.235770	.130748	.071846
FRSA16	.071056	.070274	.181154	.224817	.112553	.070965
FRSA17	.072332	.112374	.359388	.322406	.135809	.057307
FRSA18	.116419	.156189	.291768	.177202	.149308	.128279
FRSA19	.109463	.131201	.407437	.376355	.189166	.112811
FRSA20	.114676	.122301	.353677	.299982	.159075	.087417
FRSA21	.178801	.215523	.778950	.551163	.262677	.175390
FRSA22	.120655	.215500	.637838	.442379	.258235	.148438
FRSA23	.119312	.146957	.427605	.358716	.181104	.108217
FRSA24	.128015	.149136	.490862	.407582	.155212	.084350
FRSA25	.139702	.098171	.337062	.372184	.124700	.077472
FRSA26	.138379	.139771	.452864	.488658	.188072	.143889
FRSA27	.194217	.227732	.831379	.645772	.280769	.150539
FRSA28	.197354	.245239	.810015	.636341	.272891	.181399
FRSA29	.128356	.183799	.721544	.518360	.226423	.098569
FRSA30	.084154	.181158	.638465	.468545	.208726	.097644
	FRSA7	FRSA8	FRSA9	FRSA10	FRSA11	FRSA12
FRSA7	1.091390					
FRSA8	.555833	1.472290				
FRSA9	.490292	.563377	1.109640			
FRSA10	.251684	.189099	.329948	.861518		
FRSA11	.426622	.599038	.423962	.146082	1.047210	
FRSA12	.413891	.336896	.269138	.201168	.298327	1.202100
FRSA13	.363556	.361164	.306095	.129905	.383982	.268477
FRSA14	.478930	.351024	.290396	.158737	.282779	.712260
FRSA15	.272279	.153705	.168675	.094368	.142557	.523118
FRSA16	.229876	.120446	.197568	.085440	.113556	.350313
FRSA17	.377821	.229998	.220061	.099375	.249429	.643725
FRSA18	.219239	.333695	.273384	.087174	.317026	.163743
FRSA19	.363472	.373768	.316835	.145720	.345014	.377040

Table 6 (continued)

Variance-covariance matrix for FRS, N=922

	FRSA1	FRSA2	FRSA3	FRSA4	FRSA5	FRSA6
FRSA20	.290314	.295060	.278230	.180708	.316912	.305435
FRSA21	.713810	.581439	.553479	.242529	.503079	.445328
FRSA22	.584152	.569845	.822967	.350950	.499417	.403491
FRSA23	.414551	.421112	.306407	.145251	.337980	.441406
FRSA24	.461766	.379216	.291225	.164040	.288009	.708617
FRSA25	.388386	.287309	.235741	.178033	.214256	.620672
FRSA26	.438458	.332476	.327419	.147550	.305029	.310415
FRSA27	.816438	.698272	.567776	.236268	.519533	.546354
FRSA28	.754049	.679605	.564290	.270265	.514017	.524751
FRSA29	.758920	.690485	.543354	.191640	.528797	.479733
FRSA30	.654428	.670961	.517416	.231672	.520239	.487195

Table 6 (continued)

Variance-covariance matrix for FRS, N=922

	FRSA13	FRSA14	FRSA15	FRSA16	FRSA17	FRSA18
FRSA13	.681719					
FRSA14	.290357	1.536430				
FRSA15	.175422	.543846	1.004870			
FRSA16	.177701	.351742	.552355	.826681		
FRSA17	.231240	.870063	.659637	.483172	1.354720	
FRSA18	.146926	.204702	.114710	.095384	.141031	.781815
FRSA19	.260918	.561217	.276091	.167492	.509801	.218473
FRSA20	.194322	.381514	.182825	.106819	.259535	.255502
FRSA21	.413456	.582698	.269785	.266840	.503390	.228132
FRSA22	.352113	.444120	.298943	.241734	.408403	.298948
FRSA23	.274773	.628419	.433366	.357563	.659407	.249470
FRSA24	.274012	.962729	.537491	.366161	.903916	.234827
FRSA25	.245745	.784980	.532854	.442657	.818009	.142944
FRSA26	.374485	.317136	.214150	.254053	.312967	.159428
FRSA27	.464043	.781072	.368461	.269341	.678605	.277784
FRSA28	.427364	.703434	.404433	.301387	.596391	.294838
FRSA29	.345611	.673641	.330933	.223127	.554323	.260321
FRSA30	.302454	.684417	.369174	.205854	.545571	.268936
	FRSA19	FRSA20	FRSA21	FRSA22	FRSA23	FRSA24
FRSA19	1.444340					
FRSA20	.698247	1.233380				
FRSA21	.543274	.475031	1.410460			
FRSA22	.448147	.377333	.823512	1.624930		
FRSA23	.474414	.381026	.530017	.480915	1.233850	
FRSA24	.687106	.387545	.610833	.545646	.806462	1.414780
FRSA25	.557686	.327687	.525129	.400204	.666733	.918606
FRSA26	.400828	.221173	.567919	.438365	.366627	.379402
FRSA27	.616270	.404926	.995822	.783989	.657657	.790962
FRSA28	.585379	.429056	.971324	.805091	.587893	.745804
FRSA29	.540872	.442795	.926691	.773934	.544998	.724899
FRSA30	.597491	.489169	.819093	.781040	.526613	.725843
	FRSA25	FRSA26	FRSA27	FRSA28	FRSA29	FRSA30
FRSA25	1.477520					
FRSA26	.390654	.833485				
FRSA27	.737387	.642077	1.640580			
FRSA28	.618728	.621590	1.278830	1.487010		
FRSA29	.619257	.459168	1.203630	1.159540	1.842260	
FRSA30	.577957	.436090	1.011050	1.037080	1.312970	1.778260

Appendix D

Parenting Stress Index

Table 1
Descriptive Statistics for PSI, Items 1-101, N=922

VARIABLE	MEAN	ST. DEV.	SKEWNESS	KURTOSIS	MINIMUM	FREQ.	MAXIMUM	FREQ.
PSIA1	1.941	.990	1.383	1.790	1.000	325	5.000	33
PSIA2	2.920	1.269	-.024	-1.282	1.000	139	5.000	84
PSIA3	3.303	1.151	-.342	-.843	1.000	63	5.000	126
PSIA4	3.249	1.212	-.340	-.934	1.000	90	5.000	130
PSIA5	2.637	1.313	.441	-1.056	1.000	191	5.000	104
PSIA6	3.620	1.187	-.692	-.500	1.000	58	5.000	225
PSIA7	2.922	1.307	-.013	-1.335	1.000	150	5.000	96
PSIA8	3.125	1.372	-.196	-1.377	1.000	138	5.000	150
PSIA9	3.351	1.061	-.310	-.889	1.000	28	5.000	106
PSIA10	4.020	1.121	-1.262	.897	1.000	50	5.000	374
PSIA11	1.483	.839	2.459	6.910	1.000	597	5.000	25
PSIA12	4.286	.973	-1.533	1.876	1.000	18	5.000	492
PSIA13	4.202	.958	-1.514	2.168	1.000	23	5.000	409
PSIA14	3.945	1.009	-1.032	.716	1.000	28	5.000	293
PSIA15	1.439	.779	2.484	7.262	1.000	616	5.000	15
PSIA16	2.738	.959	-.278	-.189	1.000	133	5.000	22
PSIA17	3.798	1.057	-.929	.249	1.000	34	5.000	232
PSIA18	4.148	1.004	-1.474	1.871	1.000	30	5.000	390
PSIA19	4.059	.989	-1.238	1.199	1.000	23	5.000	336
PSIA20	3.710	1.123	-.745	-.343	1.000	37	5.000	234
PSIA21	4.277	1.002	-1.492	1.532	1.000	17	5.000	501
PSIA22	3.656	1.085	-.511	-.513	1.000	29	5.000	228
PSIA23	2.987	1.290	.061	-1.185	1.000	122	5.000	134
PSIA24	4.116	1.013	-1.409	1.628	1.000	30	5.000	375
PSIA25	3.264	1.200	-.125	-1.256	1.000	43	5.000	147
PSIA26	3.289	1.247	-.333	-1.079	1.000	83	5.000	150
PSIA27	4.331	.925	-1.758	3.016	1.000	19	5.000	488
PSIA28	3.706	1.306	-.695	-.815	1.000	65	5.000	328
PSIA29	2.971	1.313	.031	-1.328	1.000	128	5.000	120
PSIA30	2.036	.873	1.187	1.896	1.000	227	5.000	20
PSIA31	3.616	1.056	-.754	-.099	1.000	39	5.000	161
PSIA32	2.337	1.058	.811	-.092	1.000	172	5.000	34
PSIA33	3.703	1.111	-.951	.235	1.000	59	5.000	204
PSIA34	3.611	1.041	-.662	-.371	1.000	25	5.000	157
PSIA35	3.203	1.218	-.246	-1.152	1.000	77	5.000	118
PSIA36	3.530	1.211	-.745	-.591	1.000	73	5.000	170
PSIA37	3.934	.980	-.962	.620	1.000	22	5.000	278
PSIA38	3.901	.893	-.989	1.117	1.000	17	5.000	214
PSIA39	3.456	1.186	-.478	-.828	1.000	57	5.000	175
PSIA40	1.665	1.028	1.583	1.431	1.000	558	5.000	11
PSIA41	2.652	1.019	.250	-.272	1.000	123	5.000	44
PSIA42	1.670	1.015	1.668	2.229	1.000	549	5.000	29
PSIA43	1.793	.962	1.522	2.395	1.000	422	5.000	31
PSIA44	3.251	1.234	-.157	-1.226	1.000	60	5.000	155
PSIA45	2.836	1.427	.120	-1.436	1.000	211	5.000	135
PSIA46	3.155	1.145	-.103	-1.037	1.000	58	5.000	105

Table 1 (continued)

VARIABLE	MEAN	ST. DEV.	SKEWNESS	KURTOSIS	MINIMUM	FREQ.	MAXIMUM	FREQ.
PSIA47	3.841	1.081	-.957	.235	1.000	36	5.000	266
PSIA48	3.576	1.190	-.672	-.615	1.000	57	5.000	200
PSIA49	3.710	.996	-.900	.249	1.000	26	5.000	160
PSIA50	3.444	1.143	-.464	-.809	1.000	46	5.000	152
PSIA51	4.129	.874	-1.358	2.126	1.000	13	5.000	319
PSIA52	3.576	1.131	-.668	-.534	1.000	43	5.000	175
PSIA53	1.522	.734	1.882	5.073	1.000	532	5.000	10
PSIA54	2.134	.849	1.105	1.546	1.000	166	5.000	15
PSIA55	3.910	1.045	-1.003	.392	1.000	27	5.000	286
PSIA56	3.671	1.038	-.767	-.165	1.000	26	5.000	171
PSIA57	2.325	.810	.324	.232	1.000	130	5.000	9
PSIA58	2.021	.888	.398	-.613	1.000	311	5.000	4
PSIA59	2.790	.988	.572	-.380	1.000	38	5.000	59
PSIA60	2.879	1.060	.473	-.612	1.000	44	5.000	86
PSIA61	2.044	.843	.688	.706	1.000	249	5.000	12
PSIA62	4.390	.772	-1.607	3.295	1.000	6	5.000	474
PSIA63	4.324	.900	-1.696	2.977	1.000	17	5.000	475
PSIA64	3.981	1.055	-.914	-.063	1.000	14	5.000	347
PSIA65	4.071	1.024	-1.296	1.186	1.000	27	5.000	355
PSIA66	1.869	.992	1.408	1.790	1.000	381	5.000	30
PSIA67	4.184	.923	-1.494	2.474	1.000	24	5.000	382
PSIA68	2.568	1.133	.356	-1.077	1.000	148	5.000	26
PSIA69	2.916	1.189	-.067	-1.257	1.000	112	5.000	53
PSIA70	3.888	.932	-.947	.597	1.000	13	5.000	222
PSIA71	3.357	1.152	-.322	-1.088	1.000	38	5.000	133
PSIA72	3.452	1.143	-.493	-.902	1.000	39	5.000	143
PSIA73	3.642	1.000	-.913	.120	1.000	28	5.000	126
PSIA74	3.078	1.283	-.162	-1.363	1.000	107	5.000	102
PSIA75	3.876	.938	-.963	.674	1.000	16	5.000	218
PSIA76	3.957	.922	-1.148	1.288	1.000	18	5.000	242
PSIA77	3.662	1.013	-.671	-.432	1.000	13	5.000	162
PSIA78	4.069	.761	-1.096	1.988	1.000	4	5.000	238
PSIA79	4.189	.798	-1.211	1.945	1.000	5	5.000	335
PSIA80	3.485	1.132	-.505	-.842	1.000	36	5.000	153
PSIA81	3.727	1.191	-.934	-.110	1.000	65	5.000	246
PSIA82	3.212	1.146	-.192	-1.131	1.000	49	5.000	102
PSIA83	3.694	1.125	-.813	-.229	1.000	43	5.000	215
PSIA84	3.526	1.372	-.587	-1.009	1.000	105	5.000	270
PSIA85	3.846	1.116	-1.038	.339	1.000	47	5.000	274
PSIA86	2.947	1.287	.133	-1.307	1.000	107	5.000	118
PSIA87	3.405	1.247	-.570	-.898	1.000	85	5.000	154
PSIA88	3.518	1.220	-.547	-.863	1.000	57	5.000	202
PSIA89	3.830	1.077	-1.050	.460	1.000	41	5.000	244
PSIA90	2.624	1.227	.431	-1.040	1.000	155	5.000	66
PSIA91	3.923	1.026	-1.133	.804	1.000	30	5.000	269
PSIA92	3.951	.910	-1.029	.987	1.000	14	5.000	244

Table 1 (continued)

VARIABLE	MEAN	ST. DEV.	SKEWNESS	KURTOSIS	MINIMUM FREQ.		MAXIMUM FREQ.	
PSIA93	3.796	.997	-.841	-.047	1.000	12	5.000	204
PSIA94	3.871	.924	-.926	.491	1.000	10	5.000	208
PSIA95	2.294	1.129	.875	-.134	1.000	213	5.000	46
PSIA96	3.075	1.173	-.113	-1.270	1.000	68	5.000	76
PSIA97	3.529	1.182	-.672	-.664	1.000	57	5.000	169
PSIA98	2.211	.942	1.128	.979	1.000	156	5.000	24
PSIA99	2.752	1.253	.212	-1.293	1.000	145	5.000	65
PSIA100	3.692	1.025	-.881	.068	1.000	28	5.000	162
PSIA101	3.541	1.055	-.922	-.241	1.000	39	5.000	92

Table 2

Variance-covariance matrix for PSI, Items 1-101, N=922

	PSI1	PSI2	PSI3	PSI4	PSI5	PSI6
PSI1	.980268					
PSI2	.409025	1.611350				
PSI3	.090148	.397104	1.324340			
PSI4	.054545	.309601	.815692	1.470070		
PSI5	.273354	.077124	-.239398	-.341582	1.725020	
PSI6	.211831	.472732	.478839	.425918	-.039756	1.408540
PSI7	.297056	.770938	.335208	.261609	.038371	.575836
PSI8	-.077223	.296929	.207415	.203142	-.276711	.210065
PSI9	-.072776	-.009774	.180698	.125340	.017517	.075593
PSI10	-.017263	.271860	.314164	.332253	-.035910	.292027
PSI11	.136480	.017153	-.029995	-.008108	.140864	-.040646
PSI12	-.021288	.141286	.184549	.202730	-.083086	.185503
PSI13	-.126317	-.002864	.135303	.219491	-.215384	.037585
PSI14	.021474	.252881	.238302	.302696	-.115216	.213985
PSI15	.106435	.007915	-.036778	-.096277	.148442	-.010185
PSI16	-.088188	-.213297	-.161606	-.185610	.031238	-.156174
PSI17	.053353	.243374	.321331	.321660	-.081066	.180835
PSI18	-.090879	-.033518	.170219	.240348	-.226562	.089873
PSI19	-.019153	.144983	.173628	.194657	-.084323	.154532
PSI20	-.006373	.221992	.373116	.384943	-.156283	.227354
PSI21	-.130781	.014281	.077727	.175820	-.178319	.135477
PSI22	-.027873	.168556	.397444	.477858	-.202054	.319515
PSI23	-.164980	-.030343	.440873	.741900	-.385889	.267097
PSI24	-.156170	-.066669	.210709	.312527	-.308244	.026626
PSI25	.174723	.409714	.407748	.444026	-.032331	.336564
PSI26	-.164548	-.078854	.415595	.584111	-.302711	.143874
PSI27	.017093	.136177	.113399	.182951	-.117272	.098017
PSI28	-.008735	.039330	.074541	.092866	-.046427	.077779
PSI29	.116431	.160608	.189886	.207088	-.028298	.166525
PSI30	-.046689	-.080726	-.099136	-.101762	.068383	-.087787
PSI31	-.005546	.218352	.388520	.427445	-.205294	.239216
PSI32	.163123	.222148	.206864	.173189	-.053245	.151098
PSI33	-.046502	.071931	.210695	.211020	-.103066	.044566
PSI34	.122247	.290261	.347695	.352289	.007713	.245477
PSI35	-.006383	.192574	.263088	.271781	-.162471	.140646
PSI36	-.016769	.235738	.354682	.406784	-.169484	.236168
PSI37	-.129163	-.059958	.191560	.243752	-.235550	.065402
PSI38	-.094216	.041780	.273601	.341396	-.220027	.124269
PSI39	.065404	.126793	.088358	.082348	.160486	.005770
PSI40	-.090161	-.226646	-.264417	-.247016	.049061	-.113923
PSI41	.049876	.239219	.274822	.345547	-.170506	.244237
PSI42	-.070361	-.297992	-.307577	-.283030	.055223	-.282999
PSI43	.016029	-.119133	-.192709	-.147505	.149464	-.062653
PSI44	.150299	.340830	.355392	.404797	-.027069	.269139

Table 2 (continued)
Variance-covariance matrix for PSI, Items 1-101, N=922

	PSI1	PSI2	PSI3	PSI4	PSI5	PSI6
PSI45	-.168298	.082435	.164521	.208379	-.240044	.023965
PSI46	.126466	.313253	.315613	.265056	-.018427	.379444
PSI47	.006766	.151266	.239930	.427979	-.290994	.155628
PSI48	-.072917	.077622	.342703	.480111	-.286195	.146662
PSI49	.117801	.173948	.206549	.151419	-.018441	.156778
PSI50	.088680	.200528	.351915	.511490	-.209424	.232354
PSI51	-.007804	.119949	.111754	.094296	-.015381	.109293
PSI52	.035661	.143855	.186569	.262413	-.152243	.186011
PSI53	-.022578	-.089411	-.070481	-.044906	.050229	-.047000
PSI54	.097028	-.040179	-.086933	-.140711	.230687	-.061709
PSI55	-.010402	.167901	.266929	.280725	-.166674	.208744
PSI56	-.003176	.263465	.303858	.305107	-.198585	.242503
PSI57	-.033237	-.154161	-.087235	-.090397	.022310	-.079006
PSI58	-.042000	-.151316	-.121005	-.070271	-.010982	-.085254
PSI59	-.042773	.164325	.162599	.087598	.021107	.081480
PSI60	-.071436	.177097	.117885	.096927	-.002824	.020536
PSI61	.013474	-.107172	-.120227	-.194589	.148627	-.124663
PSI62	-.009799	.085601	.097142	.094238	.028188	.068312
PSI63	.039512	.151940	.144473	.149287	-.004023	.149160
PSI64	.151940	.360052	.318260	.167037	.082638	.303660
PSI65	-.010225	.095568	.063363	.054471	-.000825	.118089
PSI66	.083542	.054860	.011933	-.012156	.041425	-.014362
PSI67	.006308	.171087	.145239	.081312	-.046873	.136874
PSI68	.085355	.272701	.154671	.150028	-.076143	.038196
PSI69	.055825	.202837	.151620	.190757	-.112069	.167369
PSI70	.045350	.116866	.162024	.217879	-.101688	.138866
PSI71	.090504	.235914	.221233	.231312	-.138255	.139286
PSI72	.017725	.206655	.226806	.240596	-.167182	.077693
PSI73	.044026	.264465	.193744	.181576	-.071335	.120363
PSI74	.111987	.366958	.192818	.187317	-.113672	.180191
PSI75	.067572	.265602	.212568	.230800	-.023824	.186400
PSI76	-.015726	.195051	.181098	.150032	-.024300	.158974
PSI77	.094012	.259853	.215073	.201516	.044428	.223365
PSI78	.050672	.195683	.177587	.150990	.004239	.182260
PSI79	.059766	.147549	.169981	.149991	-.009585	.092616
PSI80	.056555	.260597	.291850	.242251	-.159580	.222112
PSI81	.003610	.015395	.053205	.146996	-.179105	.086965
PSI82	.067227	.207405	.208739	.181199	.010453	.147744
PSI83	.032843	.117534	.157966	.207677	-.172370	.174743
PSI84	.001862	.195655	.228343	.161155	-.031212	.183306
PSI85	.028922	.150525	.168278	.183924	-.147243	.130388
PSI86	.024076	.157723	.160771	.164625	-.129635	.042879
PSI87	-.001548	.148677	.221439	.186486	-.160121	.073093
PSI88	-.032587	.088982	.134186	.162387	-.175178	.064753
PSI89	.009753	.205957	.208202	.237913	-.147134	.154620

Table 2 (continued)

Variance-covariance matrix for PSI, Items 1-101, N=922

	PSI1	PSI2	PSI3	PSI4	PSI5	PSI6
PSI90	.015414	.093351	.173584	.157916	-.117397	.112801
PSI91	.025676	.192405	.163000	.186962	-.071419	.124088
PSI92	.015540	.207644	.172483	.153014	-.022612	.174231
PSI93	-.013276	.209341	.196842	.173830	-.114848	.126629
PSI94	.015013	.182788	.170873	.157332	-.074337	.122759
PSI95	-.100994	-.255302	-.168026	-.221259	.002474	-.162990
PSI96	.016275	.234213	.240860	.293006	-.169656	.126604
PSI97	.056869	.285695	.238399	.200214	-.071072	.113996
PSI98	-.013552	-.137166	-.130851	-.111934	.050810	-.092669
PSI99	-.017934	.075470	.101759	.104575	-.216787	-.074029
PSI100	-.021951	.195053	.243949	.216652	-.152944	.120479
PSI101	.067175	.162257	.119551	.063701	-.060233	.076571
	PSI7	PSI8	PSI9	PSI10	PSI11	PSI12
PSI7	1.709420					
PSI8	.493877	1.881260				
PSI9	.025684	.081393	1.126010			
PSI10	.298992	.240657	.141468	1.256950		
PSI11	.024178	-.079986	.035932	-.148964	.703571	
PSI12	.067987	.102241	.081161	.227908	-.256282	.947240
PSI13	.018394	.180553	.060161	.298950	-.186456	.259375
PSI14	.139153	.142954	.058495	.256244	-.168686	.364367
PSI15	.055878	-.045540	.058950	-.067234	.188391	-.182807
PSI16	-.145383	-.015767	.083804	-.026335	.029801	-.109345
PSI17	.200065	.100088	-.016437	.187287	-.079299	.214023
PSI18	-.040270	.125939	.055317	.298950	-.134200	.243386
PSI19	.139355	.143444	-.009351	.172443	-.104266	.159070
PSI20	.185830	.185093	-.014166	.253220	-.115043	.266505
PSI21	.039516	.108268	.121316	.097985	-.038282	.114992
PSI22	.213797	.137610	.097422	.242733	-.052260	.217880
PSI23	.005494	.200677	.028777	.135978	-.007799	.056903
PSI24	-.068018	.135471	.062670	.252814	-.185862	.157831
PSI25	.250788	-.034835	-.028811	.157801	-.066113	.276244
PSI26	-.151170	.209603	.104232	.200634	-.066756	.109484
PSI27	.138782	.110798	.064135	.234614	-.169735	.209194
PSI28	.158347	.133518	.069822	.028593	-.113509	.117912
PSI29	.166006	.034345	-.053778	-.117731	-.061319	.206005
PSI30	-.049319	.043159	-.019463	-.102831	.105858	-.166611
PSI31	.259495	.139049	-.010237	.216796	-.049245	.164944
PSI32	.198583	.197652	-.051590	.112089	.086161	.063126
PSI33	.072606	.174485	.003713	.189221	-.028178	.129477
PSI34	.184835	.109959	-.002256	.250858	-.051235	.181574

Table 2 (continued)
 Variance-covariance matrix for PSI, Items 1-101, N=922

	PSI7	PSI8	PSI9	PSI10	PSI11	PSI12
PSI35	.306423	.418474	.076975	.220748	-.013361	.037508
PSI36	.155469	.185883	.063169	.242574	-.008413	.154161
PSI37	.032745	.224644	.094363	.265123	-.065093	.076325
PSI38	.015946	.153752	.051650	.248452	-.064151	.111819
PSI39	-.101267	-.072836	.025386	.022589	-.026860	.079328
PSI40	-.149978	-.058138	.115836	-.199784	.088229	-.175378
PSI41	.126990	.096334	-.069520	.111801	-.028293	.174985
PSI42	-.180369	-.035139	.010532	-.182497	.134856	-.197710
PSI43	-.033518	-.157481	.102137	-.160804	.068974	-.136695
PSI44	.200108	.013507	-.053146	.150885	-.070101	.244265
PSI45	.092851	.179647	.044159	.039002	-.024370	.010991
PSI46	.291091	.032095	.039116	.053299	.017251	.100493
PSI47	.055252	.094115	-.008834	.194205	-.113295	.243971
PSI48	.083025	.117214	-.032848	.157033	-.105366	.189964
PSI49	.108472	.061721	.070579	.101565	.005467	.068429
PSI50	.098740	.051236	.008946	.139022	-.026206	.134516
PSI51	.063293	.031781	.067980	.113710	-.071115	.103069
PSI52	.157944	.062925	-.033880	.121267	-.115181	.160648
PSI53	-.010248	-.018526	-.020646	-.079709	.115697	-.116967
PSI54	.026597	-.097341	.020136	-.112122	.174207	-.129244
PSI55	.117073	.142809	.055843	.173527	-.082703	.142730
PSI56	.171920	.169344	.022020	.149817	-.153703	.217980
PSI57	-.048396	-.047189	-.008934	-.057397	.038013	-.087840
PSI58	-.064620	-.024479	.026437	-.040579	.056211	-.147042
PSI59	.173628	.185057	.063956	.169391	-.048472	.029431
PSI60	.170715	.177135	.057453	.234625	-.031798	-.002955
PSI61	.013248	-.077220	-.028644	-.088821	.050109	-.137611
PSI62	.052240	.068596	.091288	.183519	-.088448	.153007
PSI63	.135015	.097496	.060937	.236848	-.089541	.181744
PSI64	.307975	.042677	.031489	.262079	-.123504	.284317
PSI65	.132487	.127998	.040293	.125477	-.064989	.055778
PSI66	-.018012	.038942	-.016376	-.040494	.152015	-.077575
PSI67	.125163	.007494	.076353	.155968	-.065818	.083956
PSI68	.142150	.079216	-.079694	.089907	.057872	-.028273
PSI69	.216055	.138844	-.013726	.156884	-.050810	.020682
PSI70	.083558	.074909	.059477	.154158	-.088723	.143857
PSI71	.082910	.127875	-.017488	.065083	-.040886	.177039
PSI72	.077702	.216275	.000796	.147517	-.109664	.133115
PSI73	.129457	.156718	.035886	.198101	-.069528	.141683
PSI74	.159300	.029413	-.067601	.052709	.015347	.157978
PSI75	.131605	.105863	.013636	.137066	-.090490	.207987
PSI76	.123694	.133747	.037620	.165869	-.048479	.051485
PSI77	.151640	.099967	.049223	.158312	-.047130	.206911
PSI78	.148064	.101064	.029738	.140685	-.047273	.148980
PSI79	.071214	.009123	.060769	.165698	-.088546	.156545

Table 2 (continued)
Variance-covariance matrix for PSI, Items 1-101, N=922

	PSI7	PSI8	PSI9	PSI10	PSI11	PSI12
PSI80	.184481	.233923	-.024364	.179429	-.055348	.107501
PSI81	.031105	.125121	.085869	.057011	-.058485	.075654
PSI82	.111278	.040425	-.066173	.091164	-.077319	.186965
PSI83	.118326	.081806	.040786	.129761	-.046370	.158248
PSI84	.133854	.140362	-.024847	.149857	-.027713	.108332
PSI85	.063199	.177222	.027742	.141836	-.040560	.143964
PSI86	.002480	.090482	-.089686	-.051137	.008136	.097725
PSI87	.064468	.169390	-.034032	.045683	-.010240	.118160
PSI88	.040412	.070073	-.015121	.096335	.018784	.064968
PSI89	.161923	.148189	.037598	.122580	-.035984	.139626
PSI90	.140013	.048731	-.004264	.044986	-.025717	.071452
PSI91	.090614	.104230	-.044621	.117711	-.041450	.085049
PSI92	.135214	.071309	.059828	.162631	-.029569	.057383
PSI93	.199043	.165695	-.015969	.189584	-.057681	.122509
PSI94	.138661	.143311	.031586	.159971	-.085758	.140145
PSI95	-.112744	-.048686	.059983	-.150178	.091229	-.125512
PSI96	.060069	.088562	-.072917	.154968	-.063944	.152327
PSI97	.203158	.142588	.037871	.066787	.039321	.054581
PSI98	-.067071	-.030781	.007928	-.059527	.036116	-.123600
PSI99	-.098679	.188627	-.051060	-.070108	-.012329	.036450
PSI100	.070020	.163216	.012013	.110310	-.043030	.082962
PSI101	.078119	.083932	-.030718	.047948	-.030314	.054605
	PSI13	PSI14	PSI15	PSI16	PSI17	PSI18
PSI13	.916869					
PSI14	.243290	1.018650				
PSI15	-.188479	-.170548	.606714			
PSI16	-.083092	-.219775	.101275	.919090		
PSI17	.258853	.202639	-.076354	-.489329	1.116650	
PSI18	.460949	.259995	-.180952	-.044025	.167746	1.007510
PSI19	.158678	.187784	-.120210	-.209593	.297209	.234546
PSI20	.291771	.299894	-.189272	-.412682	.562300	.330385
PSI21	.124047	.153407	-.018616	.051033	.042435	.177163
PSI22	.184815	.298375	-.137784	-.170565	.255329	.271138
PSI23	.183509	.133945	-.054961	-.052291	.255297	.253483
PSI24	.553519	.255136	-.152287	-.119344	.225200	.564366
PSI25	.156488	.372821	-.094629	-.318370	.407898	.147947
PSI26	.240913	.210361	-.087473	-.108775	.319565	.265411
PSI27	.276444	.210428	-.088328	-.090061	.134197	.211840
PSI28	.037491	.116211	-.047301	.020488	.016364	.105185
PSI29	.075627	.333934	-.036608	-.159703	.202114	.092429
PSI30	-.063914	-.179285	.089125	.115811	-.090267	-.121621
PSI31	.186066	.250210	-.097034	-.278732	.459671	.227125
PSI32	.081570	.101563	-.028482	-.221373	.240688	.072786

Table 2 (continued)
Variance-covariance matrix for PSI, Items 1-101, N=922

	PSI13	PSI14	PSI15	PSI16	PSI17	PSI18
PSI33	.133326	.152984	-.029317	-.206291	.250387	.197243
PSI34	.131704	.190692	-.141110	-.331474	.442587	.152947
PSI35	.105027	.133113	-.069493	-.027793	.185081	.113503
PSI36	.153144	.222695	-.070513	-.230891	.358908	.255869
PSI37	.207574	.121432	-.065324	-.005183	.127375	.282404
PSI38	.153505	.204127	-.080437	-.110436	.203477	.231745
PSI39	.032768	.050763	-.030656	-.142827	.214018	.022780
PSI40	-.100531	-.119463	.134142	.323448	-.329211	-.110069
PSI41	.092901	.234351	-.012782	-.232888	.266274	.091065
PSI42	-.097739	-.194145	.167070	.211770	-.266203	-.059878
PSI43	-.138257	-.089580	.121953	.281010	-.282808	-.120850
PSI44	.136052	.322452	-.096349	-.292608	.408704	.160624
PSI45	.054253	.072454	-.122229	-.048508	.169287	.129077
PSI46	.031900	.189726	-.046325	-.103284	.132953	.090721
PSI47	.158486	.296479	-.135473	-.252291	.321536	.237948
PSI48	.198223	.278371	-.163264	-.287326	.474307	.255650
PSI49	.069145	.113321	-.013841	-.178434	.234264	.117667
PSI50	.096201	.193776	-.045570	-.287349	.419325	.166936
PSI51	.058814	.151624	-.045342	-.043177	.074954	.067936
PSI52	.106366	.252258	-.079789	-.172233	.270181	.144119
PSI53	-.087882	-.162152	.086262	.050217	-.081282	-.082392
PSI54	-.075747	-.177313	.135648	.099047	-.112755	-.097655
PSI55	.113550	.190386	-.067289	-.115227	.211076	.194655
PSI56	.181750	.316294	-.184199	-.181899	.174602	.202910
PSI57	-.056011	-.136127	.051470	.084410	-.095998	-.071984
PSI58	-.013943	-.174838	.090833	.118341	-.082713	-.047566
PSI59	.101217	.034876	-.031274	.003567	.067534	.021358
PSI60	.119056	.068565	-.028431	-.012377	.046199	.027888
PSI61	-.125168	-.152799	.141167	.123519	-.121303	-.122751
PSI62	.161235	.146419	-.066749	-.038556	.100437	.176964
PSI63	.201538	.165713	-.067489	-.124344	.163066	.152932
PSI64	.136431	.262827	-.072855	-.187262	.248563	.085521
PSI65	.035897	.142949	-.029423	.008769	.059869	.022295
PSI66	-.056099	-.038809	.056606	.002537	-.027788	-.042611
PSI67	.087588	.147146	-.024508	-.030814	.095692	.126925
PSI68	.013222	.083596	.002329	-.053707	.089927	.032169
PSI69	.079642	.225605	-.014836	-.109892	.178338	.117513
PSI70	.117916	.267526	-.050226	-.097758	.127252	.171627
PSI71	.130820	.294912	-.061320	-.152217	.234522	.156751
PSI72	.097270	.308373	-.128512	-.099402	.213913	.185979
PSI73	.103631	.295071	-.082176	-.101646	.152395	.135274
PSI74	-.014781	.311845	-.051133	-.171791	.160014	.071971
PSI75	.088954	.295988	-.093312	-.137582	.138798	.138687
PSI76	.070617	.151824	-.035214	-.055822	.061739	.097572
PSI77	.159397	.176333	-.065342	-.215861	.266423	.109101

Table 2 (continued)
Variance-covariance matrix for PSI, Items 1-101, N=922

	PSI13	PSI14	PSI15	PSI16	PSI17	PSI18
PSI78	.117731	.137207	-.052788	-.107038	.152794	.075479
PSI79	.122541	.201622	-.061157	-.098078	.118284	.129541
PSI80	.059205	.239711	-.085254	-.078908	.050025	.114937
PSI81	.064001	.171242	-.055743	-.057494	.018225	.073802
PSI82	.064413	.202575	-.087418	-.194661	.172115	.053131
PSI83	.087460	.203443	-.062084	-.103168	.147502	.201259
PSI84	.082804	.180538	-.092198	-.007488	.066209	.013780
PSI85	.092879	.223672	-.046874	-.063013	.115155	.082383
PSI86	.069120	.195622	-.080297	-.070264	.094267	.099949
PSI87	.097666	.206738	-.092684	-.021651	.091259	.085076
PSI88	.115548	.099253	-.028707	-.062706	.140348	.161100
PSI89	.042783	.182644	-.076646	-.013599	.101039	.069397
PSI90	-.012899	.120470	-.006377	.014210	.049533	.056867
PSI91	.105905	.222709	-.067769	-.126640	.126017	.101654
PSI92	.085611	.115964	-.051877	-.083523	.096962	.123249
PSI93	.088998	.188632	-.077669	-.135011	.097104	.131118
PSI94	.069525	.200277	-.059501	-.046943	.106805	.101597
PSI95	-.031411	-.185701	.052860	.106547	-.184876	-.067487
PSI96	.117613	.233386	-.080193	-.184594	.223473	.152021
PSI97	.024590	.168291	-.044108	-.101969	.146963	.106496
PSI98	-.009100	-.122902	.046105	.070773	-.069076	-.036692
PSI99	.055426	.139477	-.043418	-.136923	.168244	.106052
PSI100	.130529	.198906	-.088736	-.097311	.104867	.105147
PSI101	-.001003	.122793	-.025700	-.073932	.084065	.016033
	PSI19	PSI20	PSI21	PSI22	PSI23	PSI24
PSI19	.978100					
PSI20	.470676	1.261320				
PSI21	.081320	.124488	1.003690			
PSI22	.229349	.382521	.248652	1.177120		
PSI23	.092972	.227441	.285085	.457348	1.663240	
PSI24	.218827	.382178	.233263	.269420	.358716	1.025610
PSI25	.270202	.474886	.168286	.410525	.307398	.252768
PSI26	.167499	.352910	.331253	.500581	.924488	.398621
PSI27	.172809	.259853	.057357	.191175	.135660	.276443
PSI28	.072451	.039654	.381141	.207696	.097113	.142725
PSI29	.086542	.241239	.226064	.289604	.243939	.126095
PSI30	-.036848	-.116660	-.050094	-.105303	-.110260	-.071476
PSI31	.216615	.400321	.129266	.426424	.409729	.262709
PSI32	.088060	.338969	-.055290	.118513	.050741	.067649
PSI33	.163801	.234689	.130859	.232864	.133711	.173086
PSI34	.292089	.641265	.042135	.279783	.209642	.187581
PSI35	.108479	.200309	.145483	.233367	.235491	.115591
PSI36	.256500	.434971	.128494	.347034	.328258	.294517

Table 2 (continued)
Variance-covariance matrix for PSI, Items 1-101, N=922

	PSI19	PSI20	PSI21	PSI22	PSI23	PSI24
PSI37	.120837	.181678	.178388	.231232	.255767	.302223
PSI38	.179524	.255938	.125214	.257416	.292063	.279992
PSI39	.162093	.215317	.046549	.103037	.041879	.083448
PSI40	-.174595	-.452207	.046994	-.199550	-.084685	-.123930
PSI41	.131904	.265075	.086336	.256366	.347266	.202188
PSI42	-.173071	-.307514	-.088215	-.220955	-.138203	-.067661
PSI43	-.119807	-.337832	-.029283	-.128080	-.056109	-.156473
PSI44	.283485	.463393	.141032	.314152	.271985	.208330
PSI45	.113499	.185739	.237743	.234320	.276883	.180654
PSI46	.125998	.220480	.145202	.262818	.208921	.045021
PSI47	.212062	.389280	.255498	.353449	.408333	.276668
PSI48	.238687	.453606	.207660	.369561	.561188	.328313
PSI49	.186091	.252341	.097024	.150857	.069170	.086705
PSI50	.252022	.414160	.172673	.339606	.482368	.225336
PSI51	.040255	.130794	.150980	.105166	.084163	.051238
PSI52	.137775	.266852	.213088	.282330	.264793	.158932
PSI53	-.036020	-.095232	-.100079	-.134039	-.097415	-.054095
PSI54	-.100950	-.168486	-.138172	-.140231	-.166670	-.125054
PSI55	.078996	.238879	.206832	.221462	.279948	.172084
PSI56	.082286	.290179	.249609	.240603	.243283	.227105
PSI57	-.012605	-.130427	-.084755	-.174751	-.079373	-.049746
PSI58	-.019649	-.083075	-.019811	-.091321	-.106136	-.029519
PSI59	.059850	.168584	-.109657	.035555	.003797	-.017151
PSI60	.034154	.134850	-.103671	.058710	-.059285	-.001052
PSI61	-.093818	-.173862	-.105995	-.180864	-.248061	-.184319
PSI62	.083527	.129481	.127686	.147671	.045235	.137048
PSI63	.138381	.217792	.139215	.174518	.078094	.150162
PSI64	.221524	.343223	.033805	.195273	-.019764	.065195
PSI65	.045799	.062802	.129193	.097165	.044440	.056949
PSI66	-.034636	-.001311	.012385	-.013464	.014450	-.039167
PSI67	.074877	.118599	.094390	.117370	.137090	.064355
PSI68	.035073	.176704	.085692	.099502	.064954	.072952
PSI69	.124213	.251576	.212366	.190977	.231286	.113937
PSI70	.126000	.152196	.226403	.214960	.184229	.124814
PSI71	.136186	.240672	.230957	.256352	.208144	.163710
PSI72	.168863	.236437	.210442	.222829	.195837	.174383
PSI73	.154517	.164426	.149148	.191119	.122400	.111072
PSI74	.177877	.183297	.181641	.194493	.107581	.063654
PSI75	.108120	.215887	.180756	.187142	.154473	.121741
PSI76	.108904	.154562	.090161	.143575	.046034	.083168
PSI77	.165120	.245452	.066605	.136639	.066171	.151825
PSI78	.106640	.143469	.068980	.123188	.059071	.089129
PSI79	.063764	.199119	.133361	.159383	.045898	.135512
PSI80	.137570	.212210	.177830	.219230	.196392	.140201
PSI81	.070368	.131341	.378174	.143296	.201041	.155147

Table 2 (continued)
Variance-covariance matrix for PSI, Items 1-101, N=922

	PSI19	PSI20	PSI21	PSI22	PSI23	PSI24
PSI82	.227730	.286897	.131994	.169977	.047938	.122331
PSI83	.142642	.178432	.351874	.229608	.242451	.220116
PSI84	.135741	.197440	.098971	.199015	.079075	.066543
PSI85	.130612	.164805	.171643	.210125	.082673	.149312
PSI86	.118093	.182101	.181552	.208911	.174005	.117959
PSI87	.148545	.230174	.139450	.235740	.102539	.159439
PSI88	.118331	.169163	.179705	.163296	.127380	.198794
PSI89	.106414	.101581	.147606	.168105	.096220	.065118
PSI90	.112064	.076477	.094059	.199899	.179074	.008618
PSI91	.106718	.205689	.170888	.225788	.074998	.132725
PSI92	.102806	.126986	.137267	.148550	.104671	.146828
PSI93	.114045	.216675	.152064	.182518	.075554	.156154
PSI94	.110733	.188425	.156294	.203172	.094947	.120315
PSI95	-.136642	-.143889	-.127069	-.177967	-.149252	-.043920
PSI96	.158671	.265007	.145730	.230702	.199850	.177040
PSI97	.189376	.257675	.206471	.168594	.052500	.089432
PSI98	-.092776	-.117840	-.143310	-.151677	-.010265	-.020228
PSI99	.123042	.216813	.060448	.116933	.144440	.151548
PSI100	.132061	.214622	.171244	.142623	.152342	.150917
PSI101	.058691	.124736	.112034	.098662	.020058	.055395
	PSI25	PSI26	PSI27	PSI28	PSI29	PSI30
PSI25	1.440780					
PSI26	.394021	1.556200				
PSI27	.218909	.166131	.855706			
PSI28	.257789	.115292	.014818	1.706130		
PSI29	.469181	.340705	.091131	.481068	1.724440	
PSI30	-.212484	-.120001	-.071571	-.137134	-.173761	.762018
PSI31	.346467	.377916	.155966	.130316	.232226	-.064016
PSI32	.223548	.073991	.063343	-.042826	.158988	-.002288
PSI33	.166125	.188299	.111548	.177393	.083885	-.059916
PSI34	.376836	.233634	.190191	.088002	.214023	-.094227
PSI35	.105574	.218848	.109892	.111072	.047447	.047863
PSI36	.369295	.413596	.173982	.086569	.272877	-.070035
PSI37	.045820	.326588	.115112	.123909	-.015867	.014389
PSI38	.163855	.316485	.101016	.120872	.151175	-.046297
PSI39	.166816	.158305	.103544	-.019401	.068146	-.013571
PSI40	-.294854	-.063901	-.143086	.068596	-.198750	.098870
PSI41	.454764	.374785	.126755	.138375	.345938	-.133748
PSI42	-.398860	-.159349	-.130884	-.057776	-.205474	.117517
PSI43	-.172262	-.129504	-.079727	-.078773	-.124632	.070603
PSI44	.897678	.307259	.191827	.205830	.375722	-.135230
PSI45	.160347	.444571	.068235	.234973	.192805	-.041726
PSI46	.326025	.163402	.128642	.247649	.216284	-.128752

Table 2 (continued)
Variance-covariance matrix for PSI, Items 1-101, N=922

	PSI25	PSI26	PSI27	PSI28	PSI29	PSI30
PSI47	.506372	.565705	.186967	.204009	.403605	-.175482
PSI48	.473454	.636053	.212100	.234609	.445765	-.145500
PSI49	.173537	.135074	.057462	.102655	.129711	-.035203
PSI50	.454077	.465800	.149513	.203275	.327880	-.112529
PSI51	.112526	.104960	.091894	.173699	.202481	-.095830
PSI52	.401793	.300548	.078549	.338843	.705266	-.234534
PSI53	-.176733	-.141987	-.104361	-.103824	-.217062	.178919
PSI54	-.192710	-.222911	-.079821	-.063671	-.177264	.201366
PSI55	.252133	.397886	.101405	.359598	.368418	-.209507
PSI56	.375524	.252352	.152262	.399501	.498509	-.265098
PSI57	-.207456	-.124377	-.073008	-.182217	-.292307	.206582
PSI58	-.205182	-.078705	-.031783	-.124245	-.256703	.237068
PSI59	-.045077	.025781	.109335	-.045138	-.049814	.026814
PSI60	-.048013	.033315	.119713	.001905	-.117780	.029956
PSI61	-.236488	-.244114	-.163478	-.057491	-.176764	.139558
PSI62	.041389	.088099	.169285	.133348	.113510	-.080223
PSI63	.144621	.133266	.177079	.088908	.078997	-.099568
PSI64	.383786	.085748	.195024	.106443	.214505	-.098184
PSI65	.086768	.106591	.150421	.214987	.204153	-.081790
PSI66	.011580	.028031	-.009837	-.017083	.057756	.080712
PSI67	.118562	.138930	.079005	.180204	.258391	-.137985
PSI68	.106293	.107301	.040890	.052136	.234902	.040440
PSI69	.237018	.273849	.089546	.233841	.556727	-.064326
PSI70	.270517	.208161	.096713	.215772	.460351	-.136062
PSI71	.401254	.233810	.122049	.283483	.519311	-.123549
PSI72	.232461	.250482	.128182	.302462	.425854	-.116097
PSI73	.234499	.178291	.133729	.221503	.376044	-.127241
PSI74	.359459	.145778	.092518	.167437	.543185	-.169102
PSI75	.322299	.157094	.144008	.269769	.447924	-.208247
PSI76	.076499	.073241	.169597	.138141	.176740	-.121082
PSI77	.348671	.130924	.157899	.178121	.303163	-.172100
PSI78	.207713	.101383	.101329	.175103	.211569	-.102505
PSI79	.224909	.153964	.137286	.179309	.243318	-.132712
PSI80	.337883	.259543	.116321	.322894	.447438	-.160694
PSI81	.245042	.271392	.100815	.530809	.297613	-.123493
PSI82	.356841	.167134	.080657	.315191	.435558	-.132239
PSI83	.296768	.242517	.049171	.484379	.366712	-.156251
PSI84	.249002	.195747	.218487	.225782	.285809	-.002023
PSI85	.271650	.188643	.171466	.331866	.403727	-.149561
PSI86	.305935	.241033	.108783	.294791	.383824	-.118547
PSI87	.297432	.248225	.197842	.281011	.375831	-.091392
PSI88	.163164	.129511	.149398	.047721	.213363	-.037107
PSI89	.145162	.141797	.121116	.217022	.253259	-.081688
PSI90	.157349	.149478	-.003029	.238798	.484785	-.097973
PSI91	.252674	.212252	.123221	.219469	.274615	-.142735

Table 2 (continued)
Variance-covariance matrix for PSI, Items 1-101, N=922

	PSI25	PSI26	PSI27	PSI28	PSI29	PSI30
PSI92	.187647	.185610	.144248	.175579	.162411	-.105741
PSI93	.139575	.113180	.146787	.174530	.150374	-.108872
PSI94	.193663	.151283	.137205	.184607	.176455	-.179957
PSI95	-.257789	-.157638	-.063678	-.088324	-.174879	.199023
PSI96	.271375	.293391	.104475	.218568	.418124	-.160198
PSI97	.202371	.124007	.048391	.262146	.240272	-.118856
PSI98	-.128549	-.088228	-.049410	-.164695	-.189240	.177004
PSI99	.169766	.254145	.007333	.148416	.351025	-.075791
PSI100	.193531	.233132	.145212	.145552	.270754	-.151818
PSI101	.123888	.138501	.065377	.186097	.250386	-.071011
	PSI31	PSI32	PSI33	PSI34	PSI35	PSI36
PSI31	1.115700					
PSI32	.191449	1.120150				
PSI33	.345796	.184934	1.233970			
PSI34	.385058	.349644	.282900	1.084520		
PSI35	.286733	.211493	.226750	.276940	1.484250	
PSI36	.466214	.207454	.296476	.333842	.263006	1.465420
PSI37	.283958	.089895	.239654	.198870	.290748	.248013
PSI38	.383370	.136551	.242343	.271040	.278750	.360930
PSI39	.214734	.173039	.227407	.243493	.152131	.184100
PSI40	-.307882	-.275779	-.133155	-.374714	-.071235	-.262884
PSI41	.247252	.137437	.028588	.270075	.013232	.319282
PSI42	-.201272	-.112445	-.086872	-.325762	-.076377	-.241117
PSI43	-.246538	-.188193	-.238576	-.270378	-.118487	-.229335
PSI44	.355171	.297677	.179507	.445585	.202060	.422594
PSI45	.217157	.023409	.201705	.055399	.173026	.397406
PSI46	.293034	.096177	.167321	.239754	.093681	.242749
PSI47	.309776	.160188	.239285	.301813	.142148	.436877
PSI48	.467273	.197555	.322757	.327681	.216819	.525922
PSI49	.229489	.114020	.307481	.284580	.199356	.118921
PSI50	.410194	.194368	.245663	.320947	.236146	.403995
PSI51	.057436	.027454	.034095	.096489	.074940	.076966
PSI52	.251876	.120096	.213550	.238887	.104984	.302252
PSI53	-.043242	.017479	-.045500	-.074290	-.031244	-.086979
PSI54	-.086544	.024725	-.030305	-.101072	-.047922	-.146562
PSI55	.218795	.098570	.229071	.194458	.108793	.268346
PSI56	.233836	.121594	.201487	.208286	.064932	.271120
PSI57	-.079146	-.092267	-.027190	-.110084	-.021469	-.079382
PSI58	-.117614	-.052911	-.033259	-.097293	-.003134	-.050019
PSI59	.047626	.039606	.102626	.118896	.183580	.070855
PSI60	.081569	.055700	.068119	.122603	.139078	.099947
PSI61	-.144700	-.054072	-.059504	-.122761	-.044880	-.209278
PSI62	.121072	.003416	.113798	.078768	.111868	.126023

Table 2 (continued)

Variance-covariance matrix for PSI, Items 1-101, N=922

	PSI31	PSI32	PSI33	PSI34	PSI35	PSI36
PSI63	.172077	.015937	.146212	.143566	.122075	.126406
PSI64	.163777	.137976	.114064	.377810	.169105	.159641
PSI65	.022153	.011988	.021786	.056156	.063979	-.002656
PSI66	-.028747	.108189	.048051	.045511	.079569	.037040
PSI67	.105567	.011704	.092599	.092379	.085628	.122516
PSI68	.128178	.139657	.172516	.120178	.092414	.167304
PSI69	.181972	.170725	.175226	.107991	.176832	.249553
PSI70	.102736	.129196	.129596	.154563	.118510	.152691
PSI71	.229089	.191226	.219297	.207020	.104581	.280779
PSI72	.233179	.172964	.335880	.213335	.206150	.292982
PSI73	.179721	.165468	.219139	.159735	.107808	.213921
PSI74	.134948	.081836	.165773	.140542	.003216	.317751
PSI75	.127268	.040752	.097774	.175505	.047262	.110104
PSI76	.093131	.057015	.140158	.075388	.042781	.126158
PSI77	.200274	.115342	.143992	.280257	.098477	.199007
PSI78	.154256	.060225	.118508	.189422	.067451	.130653
PSI79	.100718	.038472	.122122	.162471	.066059	.105012
PSI80	.181616	.104454	.129957	.179308	.149583	.245304
PSI81	.122628	.028063	.089010	.032214	.041300	.144697
PSI82	.192802	.118374	.114939	.222086	.053630	.192219
PSI83	.247079	.065059	.218357	.158701	.075498	.253598
PSI84	.172508	.068599	.093794	.132088	.087459	.270450
PSI85	.167311	.019092	.102465	.132540	.075208	.303108
PSI86	.230416	.122360	.198281	.130550	.037212	.212673
PSI87	.215337	.100096	.132284	.186104	.110055	.319060
PSI88	.185564	.124831	.174706	.162403	-.008212	.201080
PSI89	.180439	.108701	.164299	.090184	.152676	.180682
PSI90	.152261	.031755	.198194	.076822	.189542	.191057
PSI91	.161106	.099781	.221366	.154193	.072359	.158150
PSI92	.125022	.112067	.173657	.122507	.108749	.147441
PSI93	.194209	.130597	.207004	.108494	.157900	.185352
PSI94	.112205	.063034	.127685	.152816	.095982	.106530
PSI95	-.114442	-.001669	-.150249	-.157730	-.012039	-.088740
PSI96	.219871	.171923	.260866	.202452	.080912	.305578
PSI97	.176829	.100697	.092169	.158849	.073216	.229294
PSI98	-.075115	-.051722	-.066220	-.089253	-.007208	-.078634
PSI99	.210527	.206015	.196703	.116586	.042313	.376172
PSI100	.159928	.118021	.192638	.167075	.161448	.246991
PSI101	.079929	.061198	.068008	.063527	.012472	.173864

Table 2 (continued)
Variance-covariance matrix for PSI, Items 1-101, N=922

	PSI37	PSI38	PSI39	PSI40	PSI41	PSI42
PSI37	.960854					
PSI38	.448377	.796969				
PSI39	.109164	.270899	1.407680			
PSI40	-.001524	-.134127	-.123876	1.056940		
PSI41	.033659	.165488	.077206	-.276648	1.038760	
PSI42	-.013425	-.155983	-.067512	.293032	-.288042	1.029550
PSI43	-.062072	-.129636	-.091786	.390220	-.180999	.237711
PSI44	.118743	.259757	.264661	-.259140	.414316	-.408604
PSI45	.203137	.222697	-.041572	-.067861	.102525	-.061762
PSI46	.070331	.161780	.146142	-.167055	.235783	-.174282
PSI47	.163455	.293821	.118835	-.248459	.354862	-.286537
PSI48	.214321	.320919	.089472	-.297546	.343113	-.227851
PSI49	.131663	.211932	.179474	-.145151	.075816	-.132626
PSI50	.186738	.305442	.124797	-.257250	.313327	-.232531
PSI51	.054054	.056089	-.017173	-.033787	.034082	-.056820
PSI52	.100184	.230583	.074163	-.228057	.230192	-.168861
PSI53	-.014301	-.036454	-.024859	.102283	-.109711	.116828
PSI54	-.082324	-.118014	-.028034	.122746	-.179434	.188212
PSI55	.150757	.193197	.029620	-.110090	.212858	-.137364
PSI56	.122687	.202998	.039765	-.179748	.226508	-.218007
PSI57	-.068484	-.091594	-.073622	.118938	-.117608	.116323
PSI58	.006670	-.038133	-.016975	.100276	-.153534	.132014
PSI59	.082504	.090997	.126083	-.073329	.002558	-.041219
PSI60	.111711	.066705	.067053	-.092668	.001438	-.029340
PSI61	-.062255	-.096579	-.034416	.122411	-.227361	.193493
PSI62	.121315	.116689	.003565	-.049239	.017602	-.063389
PSI63	.130141	.134140	.047394	-.113782	.056824	-.146077
PSI64	.071408	.143573	.121811	-.240815	.233890	-.336522
PSI65	.120675	.101138	.001804	.021438	.060617	-.044043
PSI66	-.028149	-.003223	.142636	-.007020	.015657	.067304
PSI67	.061641	.127901	.099323	-.082547	.106545	-.092465
PSI68	.040852	.107247	.048910	-.113340	.078080	-.077279
PSI69	.096836	.140599	.112555	-.181114	.138109	-.137287
PSI70	.073375	.148668	.046167	-.112399	.140972	-.124183
PSI71	.088704	.197810	.091385	-.107077	.206574	-.137357
PSI72	.165665	.216398	.088371	-.115360	.171592	-.118565
PSI73	.128470	.154716	.052157	-.133112	.121849	-.134328
PSI74	.003054	.144571	.038875	-.154980	.268467	-.184558
PSI75	.020196	.116964	-.000086	-.109801	.198206	-.174719
PSI76	.089468	.063021	.029548	-.085095	.070413	-.058842
PSI77	.057762	.120265	.023064	-.182168	.212025	-.200976
PSI78	.066151	.110719	.088179	-.111584	.094119	-.130852
PSI79	.082038	.133759	.068027	-.085435	.120020	-.172105
PSI80	.157427	.205501	.000770	-.159818	.225267	-.187455
PSI81	.161825	.155052	.070026	.004907	.133644	-.050046

Table 2 (continued)

	PSI37	PSI38	PSI39	PSI40	PSI41	PSI42
PSI82	.030140	.159086	.150623	-.230430	.235453	-.192878
PSI83	.158881	.217521	.060475	-.080901	.154091	-.116369
PSI84	.126846	.189531	.076147	-.185846	.163512	-.147672
PSI85	.123743	.142278	.055864	-.118759	.212697	-.109701
PSI86	.082429	.126153	.067198	-.135008	.180082	-.063344
PSI87	.094826	.169939	.062900	-.137233	.172141	-.081659
PSI88	.143828	.134434	.124144	-.165042	.084612	-.019904
PSI89	.118008	.145909	.039223	-.099952	.147832	-.145121
PSI90	.077257	.113188	.008547	-.052891	.110206	-.058724
PSI91	.128495	.139940	.127934	-.099669	.155598	-.118121
PSI92	.124026	.099510	.077246	-.067370	.130229	-.079083
PSI93	.187441	.177442	.121316	-.166131	.082098	-.086262
PSI94	.096738	.119698	.108867	-.103020	.113584	-.121943
PSI95	.008817	-.008820	-.022835	.113815	-.163674	.125452
PSI96	.086349	.194055	.155291	-.135637	.255031	-.157707
PSI97	.125248	.164080	-.017468	-.127526	.121662	-.106492
PSI98	-.054406	-.101773	-.028148	.110046	-.063168	.098187
PSI99	.066395	.143836	.119412	-.124590	.223313	-.013772
PSI100	.086923	.146589	.102618	-.167181	.155759	-.131346
PSI37	PSI38	PSI39	PSI101	.062234	.052313	.005929
-.089575	.094723	-.059649				
	PSI43	PSI44	PSI45	PSI46	PSI47	PSI48
PSI43	.925908					
PSI44	-.173349	1.523340				
PSI45	-.088012	.122080	2.037180			
PSI46	-.093338	.250068	.227392	1.311530		
PSI47	-.185705	.509142	.393119	.234963	1.169220	
PSI48	-.225345	.404672	.561060	.228058	.740359	1.417140
PSI49	-.137098	.200647	.136251	.216629	.183748	.239975
PSI50	-.196471	.419476	.360190	.293496	.577125	.761616
PSI51	-.043033	.072354	.054669	.104178	.113695	.062395
PSI52	-.154770	.347647	.291961	.196136	.502737	.495315
PSI53	.083747	-.138743	.004190	-.037443	-.199517	-.145514
PSI54	.074274	-.171322	-.049601	-.047931	-.257851	-.216719
PSI55	-.149693	.287651	.225340	.149558	.359268	.393047
PSI56	-.140465	.383089	.253511	.310488	.374723	.299136
PSI57	.068131	-.196886	-.109463	-.125237	-.172037	-.115935
PSI58	.072441	-.140908	-.004367	-.115784	-.141276	-.064011
PSI59	-.071331	-.046407	.060914	.101869	-.078011	-.001868
PSI60	-.128078	-.011938	.060276	.066259	-.083336	-.025934
PSI61	.132745	-.205532	-.086078	-.118919	-.255701	-.225421
PSI62	-.074538	.067689	.016136	.020063	.129115	.120161
PSI63	-.104276	.181194	-.041976	.106039	.200538	.159391
PSI64	-.130849	.441660	-.025798	.247872	.209937	.127913

Table 2 (continued)

Variance-covariance matrix for PSI, Items 1-101, N=922

	PSI43	PSI44	PSI45	PSI46	PSI47	PSI48
PSI65	.005208	.123999	-.053153	.118452	.075584	.037558
PSI66	.044868	.035859	-.022616	.053337	-.030598	-.034200
PSI67	-.053941	.131956	.021011	.121573	.178499	.128223
PSI68	-.087762	.107145	.110476	.116319	.103053	.132700
PSI69	-.088526	.255760	.209051	.176191	.296357	.395598
PSI70	-.093445	.263652	.068874	.132317	.320275	.297850
PSI71	-.096838	.345989	.254634	.159872	.412984	.436042
PSI72	-.126045	.225351	.320354	.164784	.304886	.461282
PSI73	-.156292	.198789	.131441	.160214	.281043	.307334
PSI74	-.162396	.354159	.089197	.217147	.308076	.252553
PSI75	-.120151	.266315	.076624	.201219	.306254	.162437
PSI76	-.165050	.077858	.077963	.162570	.097667	.092308
PSI77	-.125126	.370224	.013697	.204514	.213144	.202110
PSI78	-.081494	.233410	-.003230	.152066	.159111	.123176
PSI79	-.131220	.247609	.070236	.151788	.266809	.153952
PSI80	-.166864	.329246	.197008	.230566	.320310	.243825
PSI81	-.018680	.250125	.201156	.194568	.300652	.221685
PSI82	-.158085	.370294	.179598	.251951	.231421	.191458
PSI83	-.165930	.325529	.213645	.197443	.361888	.343550
PSI84	-.223631	.176095	.122478	.195963	.194549	.190023
PSI85	-.109808	.232527	.231082	.122317	.343573	.316661
PSI86	-.065239	.251264	.257271	.145404	.306356	.324766
PSI87	-.133160	.239638	.231803	.161361	.304963	.286901
PSI88	-.050351	.188080	.168890	.106098	.228711	.191180
PSI89	-.079391	.134080	.156925	.117663	.214113	.224245
PSI90	-.083958	.191993	.375574	.171860	.160723	.266940
PSI91	-.135129	.193886	.091770	.185710	.260473	.184463
PSI92	-.075824	.160133	.171655	.186432	.205493	.158464
PSI93	-.126621	.161160	.145122	.187274	.192887	.108874
PSI94	-.086403	.180914	.030022	.168840	.169693	.087443
PSI95	.051400	-.221791	.036124	-.135868	-.211936	-.152090
PSI96	-.142253	.275207	.243490	.200305	.372365	.365137
PSI97	-.069950	.231770	.321397	.212842	.246857	.231900
PSI98	.108874	-.108540	-.154213	-.086882	-.203138	-.130624
PSI99	-.126043	.203826	.393894	.166888	.241043	.366869
PSI100	-.145709	.200827	.184156	.228495	.241556	.210771
PSI101	-.079852	.149545	.214288	.045446	.170259	.136763

Table 2 (continued)
Variance-covariance matrix for PSI, Items 1-101, N=922

	PSI49	PSI50	PSI51	PSI52	PSI53	PSI54
PSI49	.991870					
PSI50	.368086	1.306800				
PSI51	.092876	.067548	.763997			
PSI52	.153221	.373993	.250234	1.278160		
PSI53	-.058301	-.118754	-.136896	-.241062	.538617	
PSI54	-.035131	-.153690	-.159369	-.213603	.210452	.721559
PSI55	.131709	.223947	.184010	.412787	-.184614	-.183459
PSI56	.141539	.244746	.295448	.488061	-.214905	-.242663
PSI57	-.066480	-.111922	-.148448	-.262515	.150372	.152034
PSI58	-.056221	-.078651	-.143816	-.245314	.178173	.143960
PSI59	.090467	.011631	.047707	-.037937	-.003712	-.008728
PSI60	.065857	-.034164	.068402	-.023621	-.032479	.027657
PSI61	-.060152	-.168499	-.074150	-.152674	.121184	.163571
PSI62	.117466	.098050	.143904	.141876	-.127914	-.101919
PSI63	.119958	.102457	.080791	.105102	-.143307	-.098917
PSI64	.203912	.242677	.127217	.205025	-.116307	-.135371
PSI65	.084238	.065363	.135291	.111456	-.105257	-.103038
PSI66	.122382	.037430	-.031603	-.026459	.066300	.077442
PSI67	.119697	.109216	.088012	.247658	-.180985	-.067304
PSI68	.171645	.193869	.031888	.143558	.027832	.028315
PSI69	.170740	.332418	.075937	.417314	-.132280	-.100658
PSI70	.134316	.274366	.145813	.406428	-.221787	-.183084
PSI71	.083793	.394023	.152541	.472263	-.183306	-.145420
PSI72	.231628	.335525	.150031	.324474	-.181917	-.198000
PSI73	.172770	.192604	.173281	.302990	-.148579	-.156366
PSI74	.150688	.244289	.114752	.415159	-.214512	-.150768
PSI75	.114786	.175357	.154972	.349321	-.184001	-.191915
PSI76	.115609	.097412	.112019	.148823	-.096749	-.078302
PSI77	.149010	.222477	.207978	.279569	-.089467	-.168335
PSI78	.075369	.096599	.166160	.192036	-.077068	-.126308
PSI79	.140610	.194151	.124367	.253843	-.150678	-.116462
PSI80	.106772	.262443	.146913	.399091	-.203253	-.170487
PSI81	.020740	.138896	.201043	.308547	-.107399	-.131811
PSI82	.143742	.243277	.135907	.352836	-.129673	-.149833
PSI83	.078993	.267205	.155697	.370695	-.143195	-.142421
PSI84	.106903	.160835	.100955	.280143	-.145788	-.107350
PSI85	.095107	.210438	.100292	.392666	-.186485	-.174781
PSI86	.099113	.278621	.060022	.344310	-.125271	-.118896
PSI87	.139341	.244594	.108122	.338149	-.126932	-.124740
PSI88	.058143	.191356	.120383	.220496	-.087580	-.078441
PSI89	.056953	.192011	.054298	.192757	-.071052	-.111758
PSI90	.026460	.203464	.064425	.408374	-.043074	-.047443
PSI91	.158190	.210093	.207561	.295212	-.157394	-.192072
PSI92	.089006	.165998	.179983	.222416	-.124319	-.103689
PSI93	.090592	.154611	.160982	.236996	-.093292	-.103710

Table 2 (continued)
Variance-covariance matrix for PSI, Items 1-101, N=922

	PSI49	PSI50	PSI51	PSI52	PSI53	PSI54
PSI94	.097135	.112691	.194744	.179734	-.143234	-.185908
PSI95	-.058355	-.146814	-.070551	-.268268	.162455	.214876
PSI96	.065371	.324029	.152101	.336831	-.139015	-.173109
PSI97	.177673	.264411	.102079	.275733	-.077726	-.110065
PSI98	-.055378	-.127581	-.082702	-.216400	.143616	.155191
PSI99	.050418	.255792	-.042827	.246348	-.017951	-.046162
PSI100	.091979	.201748	.148420	.258882	-.174460	-.189524
PSI101	-.013348	.148593	.079943	.231117	-.078386	-.101321
	PSI55	PSI56	PSI57	PSI58	PSI59	PSI60
PSI55	1.093010					
PSI56	.486292	1.076460				
PSI57	-.179406	-.328350	.656228			
PSI58	-.156381	-.265743	.278861	.788934		
PSI59	-.014047	.055919	-.077470	-.081453	.975631	
PSI60	-.074954	.026467	-.059009	-.058881	.604388	1.123500
PSI61	-.157893	-.215555	.146210	.134782	-.006719	.053001
PSI62	.140117	.150172	-.051180	-.049366	.036790	.041701
PSI63	.154720	.198981	-.075232	-.090324	.076960	.057885
PSI64	.121117	.275201	-.139518	-.126761	.215696	.209705
PSI65	.173533	.227341	-.065265	-.108949	.016910	-.010668
PSI66	-.040938	-.059650	.002761	.075645	-.034555	-.082232
PSI67	.235656	.290844	-.121948	-.152559	.060398	.067717
PSI68	.023496	.131600	-.102605	.015451	.125269	.119730
PSI69	.272255	.382948	-.214925	-.065615	.028321	.032688
PSI70	.300325	.398644	-.228541	-.184425	.016498	.015832
PSI71	.245435	.406340	-.220594	-.150287	-.095068	-.083787
PSI72	.331825	.381151	-.191839	-.158070	.013213	.014799
PSI73	.309943	.363248	-.175488	-.142446	.050861	.054517
PSI74	.297535	.435086	-.180759	-.275297	-.032853	.018850
PSI75	.239624	.507596	-.251626	-.334990	.042567	.004506
PSI76	.197964	.257153	-.111747	-.097854	.109291	.142281
PSI77	.186165	.366896	-.221418	-.203703	.071078	.059424
PSI78	.169752	.264581	-.130731	-.099139	.055674	.070270
PSI79	.176327	.295529	-.121190	-.160271	.017030	.031607
PSI80	.349247	.501519	-.238268	-.194572	.086272	.137641
PSI81	.251960	.342187	-.136777	-.110257	-.086197	-.076555
PSI82	.198277	.389653	-.205466	-.192601	.036903	-.000447
PSI83	.279668	.399919	-.171816	-.135964	-.037631	-.093618
PSI84	.247719	.242956	-.106521	-.152504	.128477	.210391
PSI85	.344223	.397643	-.202879	-.145737	-.005978	.008752
PSI86	.205638	.343971	-.215068	-.218205	-.086399	-.040961
PSI87	.252960	.388249	-.179763	-.176425	.047854	.108279
PSI88	.134875	.290433	-.136172	-.119298	-.004476	.091969

Table 2 (continued)

Variance-covariance matrix for PSI, Items 1-101, N=922

	PSI55	PSI56	PSI57	PSI58	PSI59	PSI60
PSI89	.138908	.235018	-.087188	-.076846	.106478	.122260
PSI90	.170360	.224942	-.155590	-.098268	.150926	.149030
PSI91	.276389	.403547	-.176871	-.200364	.068535	.081248
PSI92	.187847	.294403	-.174041	-.154279	.077990	.121594
PSI93	.217437	.289052	-.134450	-.156527	.087993	.141935
PSI94	.197195	.312587	-.153398	-.167845	.087407	.114616
PSI95	-.177882	-.252921	.137700	.211129	-.014818	-.014749
PSI96	.310340	.382952	-.151514	-.146010	-.013915	.027218
PSI97	.221854	.395628	-.186520	-.128194	.027436	.037970
PSI98	-.173033	-.277868	.127634	.131354	.015055	-.006002
PSI99	.158870	.214705	-.098250	-.013351	-.046439	-.019405
PSI100	.302245	.392580	-.203237	-.142383	.081887	.089674
PSI101	.219554	.307661	-.130112	-.081834	.015528	.010235
	PSI61	PSI62	PSI63	PSI64	PSI65	PSI66
PSI61	.711375					
PSI62	-.066242	.596565				
PSI63	-.132786	.311893	.810028			
PSI64	-.069793	.200453	.308953	1.112580		
PSI65	-.087897	.188553	.239915	.249931	1.049310	
PSI66	-.014640	-.053023	-.033494	-.037249	.012397	.984911
PSI67	-.104842	.183086	.185526	.200144	.184586	-.054588
PSI68	.014874	.009122	.014191	.085362	.030559	.169350
PSI69	-.048400	.058703	.087916	.153802	.087398	.047930
PSI70	-.135092	.129443	.191534	.181531	.180530	-.048493
PSI71	-.146586	.111574	.110956	.150346	.142735	.069110
PSI72	-.080937	.117459	.113756	.141818	.152698	.008170
PSI73	-.093730	.119273	.156371	.179131	.163177	-.004728
PSI74	-.150064	-.022905	.069141	.154743	.146719	.037492
PSI75	-.156140	.154657	.190976	.249515	.182337	-.068266
PSI76	-.077274	.140703	.149770	.189193	.184339	-.058862
PSI77	-.154332	.122711	.194806	.357517	.192414	-.008260
PSI78	-.102798	.095054	.127607	.264105	.155841	-.034546
PSI79	-.105035	.196591	.262294	.227174	.169079	-.049012
PSI80	-.120388	.119942	.175939	.239251	.207946	-.037355
PSI81	-.039985	.098632	.127357	.097839	.115658	.028370
PSI82	-.171856	.078442	.161931	.299555	.197302	.055854
PSI83	-.124278	.151041	.138383	.177839	.157263	.007407
PSI84	-.034818	.092639	.172486	.206783	.191387	.013127
PSI85	-.139708	.099250	.169374	.112118	.173597	.018819
PSI86	-.121342	.039217	.086720	.041313	.083025	.039204
PSI87	-.104683	.090039	.154227	.171584	.118890	.060394

Table 2 (continued)

Variance-covariance matrix for PSI, Items 1-101, N=922

	PSI61	PSI62	PSI63	PSI64	PSI65	PSI66
PSI88	-.056243	.052229	.076768	.122561	.119387	.065115
PSI89	-.055242	.066095	.106982	.158470	.080198	.020435
PSI90	-.064710	.054150	.092243	.180973	.009914	.038659
PSI91	-.129037	.119134	.178094	.153901	.198708	-.028586
PSI92	-.083601	.142877	.160217	.156498	.214092	.000143
PSI93	-.050641	.125305	.160660	.173304	.162070	.024214
PSI94	-.083288	.136226	.175452	.196301	.179584	-.018061
PSI95	.126980	-.083402	-.162740	-.189982	-.164086	.074488
PSI96	-.159763	.054399	.131022	.191499	.108856	-.006369
PSI97	-.086537	.099303	.074641	.110804	.135315	.006495
PSI98	.111106	-.053354	-.048032	-.091665	-.056070	.016014
PSI99	-.026945	-.004979	.028516	-.017554	-.009534	.114858
PSI100	-.108965	.107840	.135603	.171615	.111566	-.030447
PSI101	-.053397	.040565	.008098	.061965	.045048	.024771
	PSI67	PSI68	PSI69	PSI70	PSI71	PSI72
PSI67	.851960					
PSI68	.094879	1.283600				
PSI69	.258629	.575202	1.414300			
PSI70	.339839	.176480	.458630	.868071		
PSI71	.228699	.446053	.657835	.516997	1.326250	
PSI72	.247679	.348541	.566586	.429516	.617153	1.305540
PSI73	.276706	.275297	.464105	.454001	.475444	.637624
PSI74	.281059	.231259	.483286	.433204	.471034	.480569
PSI75	.245300	.102864	.238295	.343248	.313970	.257735
PSI76	.180602	.055062	.138605	.179670	.160919	.239971
PSI77	.147826	.112700	.204463	.279610	.282323	.210213
PSI78	.143365	.089030	.111770	.157293	.187003	.141605
PSI79	.214894	.054409	.180816	.261062	.249558	.237029
PSI80	.280762	.220365	.473758	.406011	.430707	.368981
PSI81	.162931	.082600	.305706	.283105	.278197	.300873
PSI82	.181422	.140323	.354960	.271460	.320126	.262694
PSI83	.181320	.153387	.359880	.343645	.392071	.326322
PSI84	.169051	.198274	.297967	.228721	.278636	.338115
PSI85	.215984	.159484	.358257	.352813	.391661	.392018
PSI86	.153026	.256152	.471311	.318624	.572559	.569051
PSI87	.197953	.215931	.339197	.326315	.383346	.441943
PSI88	.093998	.210752	.310890	.196437	.317976	.351329
PSI89	.092819	.171393	.257821	.191493	.283712	.354364
PSI90	.151861	.184422	.396790	.215316	.292879	.258041
PSI91	.174909	.165420	.273692	.300834	.302631	.347570
PSI92	.141429	.121176	.241409	.191007	.263195	.293675

Table 2 (continued)

Variance-covariance matrix for PSI, Items 1-101, N=922

	PSI67	PSI68	PSI69	PSI70	PSI71	PSI72
PSI93	.160330	.184415	.283713	.196523	.271616	.332278
PSI94	.120458	.107091	.216137	.162547	.190564	.262564
PSI95	-.119400	-.065165	-.160008	-.177769	-.215861	-.263374
PSI96	.186031	.261472	.469890	.406934	.549215	.615528
PSI97	.132488	.218952	.328724	.243774	.346401	.341247
PSI98	-.107442	-.069299	-.148442	-.186988	-.205232	-.214109
PSI99	.072990	.247717	.371200	.174178	.387019	.404529
PSI100	.198069	.200827	.340875	.295590	.361837	.431354
PSI101	.094017	.128823	.268190	.203710	.280939	.301929
	PSI73	PSI74	PSI75	PSI76	PSI77	PSI78
PSI73	1.000960					
PSI74	.524242	1.646430				
PSI75	.267269	.404736	.879359			
PSI76	.240679	.261814	.278012	.849362		
PSI77	.249863	.306551	.409666	.248373	1.027000	
PSI78	.170743	.156017	.302683	.224486	.485741	.578362
PSI79	.232658	.205713	.333786	.179705	.253877	.191145
PSI80	.422355	.511505	.418119	.310876	.349389	.275871
PSI81	.257694	.274838	.173191	.118095	.168283	.105162
PSI82	.265352	.425688	.378582	.267131	.454518	.257663
PSI83	.311691	.360554	.277932	.184257	.246830	.218345
PSI84	.358255	.379192	.175088	.273038	.231557	.204600
PSI85	.432205	.376741	.292361	.238619	.263897	.219944
PSI86	.423843	.490406	.302650	.140886	.214696	.149951
PSI87	.420324	.385790	.314869	.206307	.260602	.186537
PSI88	.327856	.355287	.211832	.182630	.169408	.155398
PSI89	.272392	.259290	.184016	.235656	.171715	.149220
PSI90	.160725	.368619	.182278	.110754	.162074	.037176
PSI91	.391518	.393656	.296647	.262667	.288815	.208185
PSI92	.260451	.269735	.240417	.269482	.262216	.186499
PSI93	.325420	.279646	.217948	.272349	.243352	.163558
PSI94	.242571	.301100	.269567	.198513	.288569	.236891
PSI95	-.223675	-.368306	-.243710	-.187001	-.215406	-.146167
PSI96	.506755	.597915	.277460	.203037	.329814	.190059
PSI97	.279765	.326609	.304323	.248803	.222179	.125450
PSI98	-.215207	-.241326	-.198549	-.175385	-.104322	-.114211
PSI99	.277999	.295073	.057303	.111946	.104155	.028648
PSI100	.412856	.395984	.253995	.238545	.263007	.195716
PSI101	.237254	.309713	.186441	.153273	.127819	.083280

Table 2 (continued)

Variance-covariance matrix for PSI, Items 1-101, N=922

	PSI79	PSI80	PSI81	PSI82	PSI83	PSI84
PSI79	.637527					
PSI80	.338374	1.281530				
PSI81	.193431	.336102	1.418670			
PSI82	.293877	.462254	.253555	1.313380		
PSI83	.222822	.367772	.666534	.312698	1.265740	
PSI84	.215628	.527859	.199300	.311635	.213079	1.881810
PSI85	.273810	.526600	.355900	.327554	.389219	.805726
PSI86	.171781	.398083	.310482	.355214	.376674	.698450
PSI87	.230938	.505834	.313307	.375602	.348608	.950694
PSI88	.141085	.282424	.240727	.268463	.331346	.377932
PSI89	.216433	.335815	.184346	.228873	.256257	.290454
PSI90	.089030	.298909	.174967	.248266	.238936	.204762
PSI91	.256677	.446712	.283801	.339690	.265238	.355955
PSI92	.214389	.348307	.219764	.283191	.261858	.280235
PSI93	.224190	.398638	.282926	.283214	.260042	.338028
PSI94	.227424	.353630	.229424	.271259	.235182	.249795
PSI95	-.161936	-.265347	-.155130	-.187927	-.172761	-.109517
PSI96	.198735	.366616	.308831	.325553	.337889	.299587
PSI97	.205108	.394582	.202447	.307998	.315155	.273192
PSI98	-.145277	-.256828	-.165676	-.144588	-.214287	-.193228
PSI99	.089269	.216094	.163009	.186709	.264885	.232825
PSI100	.252611	.501116	.280399	.325749	.318851	.404180
PSI101	.135587	.325677	.230600	.212970	.240332	.254213
	PSI85	PSI86	PSI87	PSI88	PSI89	PSI90
PSI85	1.244390					
PSI86	.693298	1.655150				
PSI87	.776943	.987248	1.554020			
PSI88	.397965	.517203	.482607	1.488000		
PSI89	.407214	.343856	.359624	.291308	1.159120	
PSI90	.150765	.301148	.276353	.132319	.199541	1.504900
PSI91	.398524	.343276	.419294	.246321	.264702	.158596
PSI92	.289898	.272085	.312220	.313570	.258568	.185522
PSI93	.306168	.332165	.333962	.343489	.290935	.212935
PSI94	.292759	.236265	.282975	.221159	.287352	.101297
PSI95	-.184765	-.138700	-.165701	-.059578	-.193874	-.085986
PSI96	.406527	.572823	.411119	.431373	.311837	.319487
PSI97	.322484	.436285	.310597	.274998	.233701	.224710
PSI98	-.272421	-.213411	-.191547	-.178132	-.207128	-.055097
PSI99	.295691	.420869	.351783	.248765	.147296	.294898
PSI100	.424999	.430080	.424424	.373959	.308698	.176170
PSI101	.306805	.293693	.261893	.266888	.182368	.131202

Table 2 (continued).

Variance-covariance matrix for PSI, Items 1-101, N=922

	PSI91	PSI92	PSI93	PSI94	PSI95	PSI96
PSI91	1.052700					
PSI92	.438090	.828232				
PSI93	.460937	.492903	.994208			
PSI94	.431961	.437715	.440538	.853030		
PSI95	-.384507	-.229868	-.227733	-.326843	1.273990	
PSI96	.450943	.342372	.431144	.354956	-.206625	1.376580
PSI97	.352420	.257106	.331711	.257313	-.156825	.357777
PSI98	-.211709	-.210067	-.206557	-.188743	.284131	-.193928
PSI99	.179550	.120370	.168627	.069971	.031823	.433317
PSI100	.410539	.394254	.497316	.394468	-.210026	.501128
PSI101	.291539	.210010	.279802	.174508	-.181971	.298759
	PSI97	PSI98	PSI99	PSI100	PSI101	
PSI97	1.395990					
PSI98	-.489914	.887902				
PSI99	.317270	-.097250	1.570170			
PSI100	.392151	-.282160	.282383	1.051490		
PSI101	.601053	-.439559	.264795	.339441	1.113700	

Appendix E

Family Inventory of Life Events

Table 1
Descriptive Statistics for FILE, Items 1-71, N=922

Variable	Mean	Std Dev
FILE1	.39	.49
FILE2	.21	.41
FILE3	.23	.42
FILE4	.05	.23
FILE5	.24	.43
FILE6	.21	.41
FILE7	.20	.40
FILE8	.08	.27
FILE9	.13	.34
FILE10	.22	.42
FILE11	.14	.35
FILE12	.12	.33
FILE13	.49	.50
FILE14	.17	.37
FILE15	.21	.41
FILE16	.41	.49
FILE17	.18	.38
FILE18	.12	.33
FILE19	.04	.20
FILE20	.09	.29
FILE21	.15	.36
FILE22	.13	.33
FILE23	.08	.27
FILE24	.01	.10
FILE25	.23	.42
FILE26	.25	.43
FILE27	.14	.35
FILE28	.09	.29
FILE29	.05	.22
FILE30	.07	.25
FILE31	.11	.31
FILE32	.35	.48
FILE33	.13	.34
FILE34	.44	.50
FILE35	.43	.49
FILE36	.18	.38
FILE37	.08	.28
FILE38	.28	.45
FILE39	.21	.41
FILE40	.01	.11
FILE41	.23	.42
FILE42	.19	.39
FILE43	.23	.42
FILE44	.16	.37
FILE45	.28	.45
FILE46	.26	.44
FILE47	.22	.41
FILE48	.11	.31
FILE49	.20	.40
FILE50	.23	.42

Table 1 (continued)

Descriptive Statistics for FILE, Items 1-71, N=922

FILE51	.12	.32
FILE52	.09	.29
FILE53	.05	.21
FILE54	.06	.24
FILE55	.15	.39
FILE56	.02	.13
FILE57	.03	.16
FILE58	.15	.36
FILE59	.11	.32
FILE60	.02	.12
FILE61	.07	.25
FILE62	.06	.24
FILE63	.05	.22
FILE64	.04	.20
FILE65	.08	.27
FILE66	.07	.26
FILE67	.04	.19
FILE68	.05	.21
FILE69	.02	.12
FILE70	.02	.12
FILE71	.02	.14

Table 2

Polychoric correlation matrix for FILE, Items 1-71, N=922

	FILE1	FILE2	FILE3	FILE4	FILE5	FILE6
FILE1	1.000					
FILE2	.212	1.000				
FILE3	.304	.212	1.000			
FILE4	.169	.201	.435	1.000		
FILE5	.373	.269	.602	.542	1.000	
FILE6	.250	.133	.448	.224	.542	1.000
FILE7	.209	.162	.383	.035	.210	.579
FILE8	.103	.063	.434	.211	.391	.592
FILE9	.112	.214	.432	.015	.180	.572
FILE10	.223	.172	.298	.060	.318	.455
FILE11	.125	.179	.175	-.007	.183	.297
FILE12	.018	.088	.079	-.053	.277	.184
FILE13	.145	.167	.058	-.007	.058	.185
FILE14	.227	.208	.478	.384	.569	.490
FILE15	.268	.145	.528	.276	.708	.430
FILE16	.165	.204	.265	.082	.307	.393
FILE17	.121	-.074	.307	.174	.390	.247
FILE18	.428	.139	.336	.389	.532	.231
FILE19	.258	.226	.404	.524	.438	.255
FILE20	.301	.125	.357	.329	.469	.308
FILE21	.143	.149	.416	.366	.627	.413
FILE22	.067	.098	.280	.222	.192	.076
FILE23	.047	-.037	.071	-.001	.022	.150
FILE24	-.202	-.011	.282	-.698	.168	.211
FILE25	.042	-.032	.095	.053	.165	.166
FILE26	.119	.246	.145	-.047	.156	.154
FILE27	.072	-.046	.148	.225	.173	.160
FILE28	.220	.182	.196	.119	.237	.120
FILE29	-.030	-.029	.074	-.791	.167	.039
FILE30	.107	.015	.062	-.020	-.046	-.019
FILE31	-.080	.028	.081	.033	.052	-.127
FILE32	.096	.185	-.009	.165	.103	.021
FILE33	.149	.099	.289	.063	.258	.110
FILE34	.228	.177	.278	-.024	.326	.186
FILE35	.177	.210	.420	.214	.399	.319
FILE36	.169	.274	.292	.172	.268	.292
FILE37	.228	.152	.249	.101	.362	.266
FILE38	.301	.302	.070	.005	.079	.004
FILE39	.188	.048	.289	.162	.240	.175
FILE40	-.118	.180	.053	-.702	.133	.078
FILE41	.175	.415	.052	.085	.136	.088
FILE42	.181	.134	.248	.310	.211	.178
FILE43	.173	.162	.344	.162	.459	.264
FILE44	.279	.249	.264	.115	.392	.192
FILE45	.221	.170	.119	.109	.164	.090
FILE46	.069	.070	.150	.187	.177	.053

FILE47	.088	.248	.192	.002	.165	.242
FILE48	.032	.201	.142	.234	.095	-.025
FILE49	.095	.063	.145	.125	.186	.157
FILE50	.145	.013	.250	.192	.211	.115
FILE51	.071	.043	.137	.174	.170	.127
FILE52	.039	.134	.208	.251	.215	.047
FILE53	.113	.134	.249	.312	.307	.223
FILE54	.113	.106	.250	.199	.072	.013
FILE55	.242	.406	.365	.328	.351	.231
FILE56	.028	-.047	-.075	.178	-.095	-.151
FILE57	-.230	-.013	-.043	.195	.099	-.016
FILE58	.138	.026	.084	.091	.080	.005
FILE59	.023	.022	.106	-.037	.093	-.105
FILE60	-.029	.179	.295	.223	.343	.176
FILE61	.076	-.021	.225	.050	.198	.258
FILE62	.125	.070	.143	.137	.168	.201
FILE63	.143	.131	.289	.178	.239	.157
FILE64	-.008	-.079	.269	.307	.146	.009
FILE65	-.114	.211	.231	.112	.082	.077
FILE66	.221	.249	.146	.231	.204	.039
FILE67	.200	.042	.403	.477	.381	.336
FILE68	.223	.048	.432	.531	.435	.329
FILE69	.257	.099	.561	.638	.957	.386
FILE70	.186	.389	.494	.056	.275	.250
FILE71	.039	.140	.334	-.006	.207	.460

	FILE7	FILE8	FILE9	FILE10	FILE11	FILE12
FILE7	1.000					
FILE8	.455	1.000				
FILE9	.574	.408	1.000			
FILE10	.566	.148	.457	1.000		
FILE11	.435	.102	.224	.464	1.000	
FILE12	.208	.103	.029	.220	.672	1.000
FILE13	.276	.129	.154	.293	-.038	.001
FILE14	.422	.538	.240	.249	.238	.287
FILE15	.251	.400	.195	.318	.216	.276
FILE16	.306	.171	.409	.308	.243	.217
FILE17	.134	.052	.024	.194	.242	.195
FILE18	.090	.163	.053	.174	.003	.139
FILE19	.137	.246	.189	.235	.079	.025
FILE20	.295	.096	.300	.369	.138	.149
FILE21	.266	.399	.048	.302	.218	.261
FILE22	-.064	.021	.100	-.018	-.041	.183
FILE23	.056	.204	.004	-.062	-.019	.191
FILE24	.122	.445	.103	.092	.313	.354
FILE25	-.075	.075	-.015	.042	.017	.313
FILE26	.142	.120	.111	.131	.089	.087
FILE27	.008	.140	-.002	-.008	-.029	.226
FILE28	.015	.118	.146	.014	.015	.047
FILE29	.155	.272	.034	.145	.096	.109

FILE30	-.063	.064	.109	.073	-.107	.032
FILE31	-.207	.002	-.034	-.020	-.031	.135
FILE32	-.036	.040	-.001	.031	.023	.059
FILE33	.085	.104	.148	.146	.119	.059
FILE34	.148	.137	.139	.137	.133	.044
FILE35	.313	.370	.246	.321	.260	.199
FILE36	.354	.395	.273	.238	.146	.103
FILE37	.082	.339	.135	.298	.083	.115
FILE38	.058	-.032	.000	.014	.091	.037
FILE39	-.075	.244	.044	-.025	.059	.158
FILE40	-.025	.196	.079	-.209	.280	.224
FILE41	-.059	.031	-.030	.009	.019	-.001
FILE42	-.108	.142	-.069	-.145	-.042	.107
FILE43	.129	.194	.207	.199	.142	.187
FILE44	.135	.169	.163	.229	.078	.225
FILE45	.145	.086	.063	.076	.011	-.005
FILE46	-.144	-.013	-.072	.019	.114	-.006
FILE47	.205	.452	.247	.143	.065	-.165
FILE48	.203	.103	-.013	-.009	.062	.152
FILE49	-.078	.048	-.056	-.036	.051	.166
FILE50	.258	.178	.124	.129	.103	.079
FILE51	-.076	.140	.060	.014	.010	.146
FILE52	-.023	.254	.203	.165	.128	.308
FILE53	.082	.096	.007	-.068	.157	-.016
FILE54	-.033	-.026	.104	.081	.044	.137
FILE55	.197	.310	.262	.294	.167	.199
FILE56	.125	.090	.075	.092	.219	.189
FILE57	.060	.184	.051	-.033	.031	.147
FILE58	.062	.050	.025	.055	-.089	-.209
FILE59	.133	.153	-.054	.067	-.026	.089
FILE60	.111	.252	.129	-.118	.203	.155
FILE61	.134	.333	.197	.167	.112	.102
FILE62	-.039	.132	.022	-.045	-.001	.166
FILE63	.176	.528	.028	.011	.197	.218
FILE64	.027	.254	-.129	-.054	.217	-.311
FILE65	.098	.128	-.110	.032	.097	.034
FILE66	-.111	.154	-.084	.066	.068	-.096
FILE67	.217	.452	.183	-.026	.064	.114
FILE68	.134	.347	.114	-.053	-.001	.145
FILE69	.192	.494	.301	.160	.283	.247
FILE70	.265	.616	.017	-.011	.111	-.113
FILE71	.376	.606	.045	-.194	.110	.071

	FILE13	FILE14	FILE15	FILE16	FILE17	FILE18
FILE13	1.000					
FILE14	.132	1.000				
FILE15	.054	.559	1.000			
FILE16	.135	.303	.445	1.000		
FILE17	.061	.342	.374	.306	1.000	
FILE18	-.026	.287	.333	-.042	.229	1.000
FILE19	-.014	.267	.255	.008	.140	.694

FILE20	.112	.294	.408	.028	.232	.712
FILE21	.046	.454	.522	.320	.325	.261
FILE22	-.142	.213	.189	.267	.154	.096
FILE23	-.128	.196	.059	-.167	.197	.339
FILE24	-.082	.453	-.014	-.014	.155	-.041
FILE25	-.249	.151	.097	.194	.095	.084
FILE26	.079	.138	.121	.204	.069	-.012
FILE27	-.089	.139	.083	-.154	.226	.514
FILE28	.060	.152	.285	.241	.039	.047
FILE29	.160	.153	.223	.118	.100	.017
FILE30	.256	-.001	-.082	-.086	-.020	-.055
FILE31	.116	.034	.003	-.046	.096	-.295
FILE32	-.058	.001	-.040	.046	.044	.016
FILE33	.092	.231	.369	.265	.253	.011
FILE34	.043	.294	.305	.385	.233	-.024
FILE35	.035	.408	.442	.327	.255	.145
FILE36	.283	.364	.268	.409	.179	.103
FILE37	.160	.128	.189	-.024	.082	.657
FILE38	.058	-.061	.070	.011	.072	-.011
FILE39	-.123	.140	.209	.028	.136	.206
FILE40	.057	.022	-.195	-.255	.225	.410
FILE41	.072	.192	.052	.108	.123	.069
FILE42	-.040	.169	.226	.088	.141	.159
FILE43	.147	.289	.336	.408	.221	.092
FILE44	.068	.319	.319	.263	.236	.114
FILE45	.078	.213	.090	.173	.073	-.272
FILE46	-.030	.155	.086	-.061	.036	.238
FILE47	.155	.116	.056	.115	.018	.133
FILE48	.129	.151	.034	.148	.184	.152
FILE49	-.138	.193	.157	.222	.163	.149
FILE50	.076	.270	.291	.177	.166	.079
FILE51	.014	.157	.143	.095	.186	.075
FILE52	.028	.183	.244	.113	.139	.055
FILE53	-.010	.414	.223	.131	.158	.085
FILE54	.144	.063	.130	-.019	.044	-.029
FILE55	.178	.388	.346	.387	.247	.016
FILE56	.105	.015	-.286	-.277	-.103	.101
FILE57	-.050	.268	-.244	.115	-.029	.079
FILE58	.063	.145	.169	.042	.118	.067
FILE59	.028	.115	-.002	.149	.051	-.048
FILE60	-.057	.383	.250	-.059	-.055	.400
FILE61	.156	.322	.164	.122	.230	.315
FILE62	-.073	.234	.123	.154	.101	.166
FILE63	.068	.350	.186	-.077	.057	.144
FILE64	.032	.085	.091	.147	.224	.186
FILE65	-.008	.068	.030	.017	.020	.264
FILE66	.144	.044	.158	.086	.155	.127
FILE67	-.018	.238	.199	-.073	.219	.375
FILE68	-.012	.322	.243	-.071	.209	.397
FILE69	.085	.635	.386	-.059	.226	.644
FILE70	.014	.448	.386	.014	.054	.155
FILE71	-.013	.266	.308	.062	-.031	.230

	FILE19	FILE20	FILE21	FILE22	FILE23	FILE24
FILE19	1.000					
FILE20	.721	1.000				
FILE21	.263	.230	1.000			
FILE22	.354	.130	.238	1.000		
FILE23	.246	.290	-.007	.364	1.000	
FILE24	.180	-.733	.195	.342	.611	1.000
FILE25	.228	.004	.064	.578	.421	.284
FILE26	.127	.087	.204	.181	-.058	.058
FILE27	.134	.285	.128	.222	.505	-.073
FILE28	.029	-.078	.073	-.102	-.213	.184
FILE29	.108	.047	.185	-.109	.016	.138
FILE30	.048	-.022	.098	.016	-.049	.090
FILE31	-.168	-.216	.024	.116	-.083	.155
FILE32	.023	-.020	.085	.014	-.079	-.169
FILE33	.105	.034	.321	-.009	-.025	.107
FILE34	.010	.110	.325	.254	-.141	.153
FILE35	.148	.243	.312	.185	.100	.071
FILE36	.246	.147	.268	.099	-.063	.031
FILE37	.472	.710	.140	.003	.282	.036
FILE38	.088	.134	.031	-.053	-.102	-.247
FILE39	.248	.191	.162	.210	-.023	-.179
FILE40	.554	.292	.166	.211	.317	.409
FILE41	.164	.225	.109	.186	.142	-.192
FILE42	.186	.179	.019	.200	.046	.011
FILE43	.085	.121	.343	.129	-.131	-.198
FILE44	.136	.023	.294	.149	-.201	.061
FILE45	-.191	-.252	.007	.031	-.294	-.099
FILE46	.171	.172	.068	.180	.155	.330
FILE47	.067	.143	.124	-.066	-.005	.384
FILE48	-.011	-.003	.063	.199	.034	.150
FILE49	.052	.174	.101	.321	.048	.314
FILE50	.012	.105	.144	.054	.048	.083
FILE51	-.103	.156	.196	.231	.109	.132
FILE52	-.039	.154	.154	.095	.125	.314
FILE53	.123	.171	.174	.070	-.041	-.690
FILE54	-.166	-.126	-.055	.001	.182	.107
FILE55	.090	.240	.256	.175	.014	.251
FILE56	.237	-.089	-.064	-.019	.090	.330
FILE57	-.006	-.790	.015	.348	.254	.259
FILE58	.104	.088	.104	.045	.078	.193
FILE59	.097	.019	-.129	.069	.182	-.028
FILE60	.281	-.049	.408	.234	.252	.365
FILE61	.347	.327	.260	.120	.363	.262
FILE62	.270	.143	.122	.182	.421	.280
FILE63	.002	.095	.242	.086	.442	.311
FILE64	.248	.113	-.034	.124	.254	.364
FILE65	.243	.163	.103	.167	.233	.341
FILE66	.357	.155	.107	.009	.191	-.720
FILE67	-.758	.072	.229	-.094	.452	.201

FILE68	-.770	.078	.260	.035	.347	.160
FILE69	.398	.318	.594	.314	-.024	.365
FILE70	-.696	.225	.341	-.125	.252	-.598
FILE71	.212	.370	.233	.058	.259	-.614

	FILE25	FILE26	FILE27	FILE28	FILE29	FILE30
FILE25	1.000					
FILE26	.010	1.000				
FILE27	.124	-.199	1.000			
FILE28	-.060	.294	.026	1.000		
FILE29	-.023	.041	-.025	.487	1.000	
FILE30	-.142	.285	-.054	.185	.192	1.000
FILE31	.049	.193	-.172	.055	-.132	.245
FILE32	.027	.209	-.134	.026	-.013	.133
FILE33	-.077	.493	-.307	.309	.083	.080
FILE34	.226	.288	-.091	.365	.242	.142
FILE35	.109	.288	.214	.382	.206	.009
FILE36	-.148	.267	-.115	.229	.311	.184
FILE37	.137	-.033	.429	.026	.257	-.004
FILE38	.034	.152	-.036	.074	-.064	.424
FILE39	.305	.174	.330	.206	.032	.280
FILE40	.155	-.240	.288	.160	.293	.242
FILE41	.159	.226	.111	.029	-.095	.238
FILE42	.351	.131	.203	.341	.036	-.049
FILE43	.032	.251	-.203	.406	.488	.134
FILE44	.013	.278	-.069	.451	.266	.143
FILE45	.001	.186	-.237	-.010	-.039	.027
FILE46	.166	-.030	.300	.200	-.081	.079
FILE47	-.034	.119	-.017	.062	.151	.052
FILE48	.129	.167	.025	.166	-.222	.062
FILE49	.315	.072	.032	.092	.084	-.140
FILE50	.037	.081	-.038	.084	.042	.035
FILE51	.250	.097	.155	.165	-.089	.114
FILE52	.118	-.004	.233	.106	.189	-.087
FILE53	.036	.272	-.005	-.082	-.026	.088
FILE54	-.046	.239	-.176	.405	.093	.286
FILE55	.154	.184	.117	.238	.217	.002
FILE56	.086	.186	.065	-.099	.029	.249
FILE57	.262	.091	.275	-.039	-.049	.048
FILE58	.089	.096	.029	-.037	.035	.126
FILE59	.110	-.040	.035	-.106	-.079	.049
FILE60	.228	.403	.007	.100	.236	.183
FILE61	.085	.021	.239	.012	.066	.213
FILE62	.172	.083	.009	-.143	.088	.025
FILE63	.100	.063	.207	.176	-.046	.065
FILE64	.102	.030	.301	-.038	-.775	-.179
FILE65	.215	.072	.079	-.153	.074	.108
FILE66	.009	-.005	.166	.064	-.040	-.031
FILE67	.096	.062	.467	.125	-.770	.076
FILE68	.088	.053	.411	.065	-.782	.023
FILE69	.073	-.046	.364	-.766	-.709	.019

FILE70	-.017	.044	.119	-.059	-.709	.019
FILE71	-.103	.142	.192	-.122	-.741	-.044

	FILE31	FILE32	FILE33	FILE34	FILE35	FILE36
FILE31	1.000					
FILE32	.202	1.000				
FILE33	.027	.063	1.000			
FILE34	-.052	.104	.289	1.000		
FILE35	-.018	.055	.357	.584	1.000	
FILE36	.009	-.005	.235	.524	.599	1.000
FILE37	-.260	-.064	.167	.066	.343	.296
FILE38	.160	.185	.038	.163	.101	.020
FILE39	.073	.181	.116	.241	.264	-.003
FILE40	-.036	.014	.082	.015	.028	.124
FILE41	.032	.135	.109	.178	.281	.132
FILE42	.140	.105	.050	.220	.204	-.120
FILE43	.181	.117	.425	.295	.302	.364
FILE44	.032	.128	.433	.233	.200	.205
FILE45	.227	.250	.156	.254	.091	.151
FILE46	.616	.136	-.048	.065	.126	-.044
FILE47	.064	.051	.213	.095	.120	.186
FILE48	.119	.086	.164	.368	.202	.125
FILE49	.076	.123	.108	.425	.200	.008
FILE50	-.013	.087	.070	.244	.216	.187
FILE51	.190	-.018	.018	.368	.266	.073
FILE52	.208	.107	-.070	.288	.209	.158
FILE53	-.045	.238	.104	.128	.225	.047
FILE54	.135	.066	.269	.179	.173	.135
FILE55	.104	.110	.159	.385	.358	.332
FILE56	.130	.187	.079	-.156	-.078	-.002
FILE57	.178	.145	.123	.045	.102	.201
FILE58	-.003	.007	.167	.001	-.001	-.001
FILE59	.156	-.012	-.078	.111	.075	.146
FILE60	.183	.153	.133	.203	.290	.053
FILE61	.174	.037	.000	.173	.253	.299
FILE62	.129	.238	-.060	.167	.094	.212
FILE63	-.068	.085	-.015	.049	.192	.124
FILE64	.002	.163	-.211	.055	.164	.291
FILE65	.105	.052	.182	.110	.163	.045
FILE66	-.111	.137	-.079	.013	-.067	.021
FILE67	-.050	.074	.033	-.032	.287	.094
FILE68	-.032	.126	-.028	.016	.229	.063
FILE69	-.087	.153	-.132	-.011	.145	.053
FILE70	.070	-.071	.021	.132	.216	-.057
FILE71	-.151	-.102	.049	.036	.327	.187

	FILE37	FILE38	FILE39	FILE40	FILE41	FILE42
FILE37	1.000					
FILE38	.050	1.000				

FILE39	.139	.615	1.000			
FILE40	.404	.185	.261	1.000		
FILE41	.159	.560	.444	-.059	1.000	
FILE42	.074	.346	.589	.203	.434	1.000
FILE43	.129	.194	.294	.051	.243	.254
FILE44	-.010	.210	.297	.036	.195	.251
FILE45	-.108	.086	-.020	-.125	-.029	-.108
FILE46	.129	.258	.261	.009	.097	.164
FILE47	.286	.150	.105	.066	.146	-.066
FILE48	-.021	-.016	.026	.246	.060	.220
FILE49	.118	.068	.072	-.031	.094	.207
FILE50	.003	.007	-.054	-.217	.005	.120
FILE51	.205	.014	.100	.108	.111	.201
FILE52	.236	-.113	-.101	-.003	-.004	.040
FILE53	.019	.089	.155	-.694	.038	.095
FILE54	.074	-.092	-.059	.087	.018	.047
FILE55	.287	.148	.133	-.001	.181	.192
FILE56	.078	-.052	.028	.493	.013	.061
FILE57	-.013	-.169	-.022	.240	-.102	.178
FILE58	.031	.067	.042	.045	.091	.032
FILE59	.072	-.088	.028	.116	-.013	.076
FILE60	.240	.011	.090	.530	.075	.277
FILE61	.135	.123	.227	.238	.338	.270
FILE62	.117	.040	-.100	.256	.040	.157
FILE63	.058	.162	.234	.288	.101	.097
FILE64	.188	.166	.259	.165	.242	.122
FILE65	.248	-.016	.091	.315	.217	.016
FILE66	.210	.342	.080	.041	.152	.171
FILE67	.265	-.016	.296	-.678	.174	.266
FILE68	.202	.078	.376	-.691	.247	.304
FILE69	.240	.091	.510	-.602	.229	.277
FILE70	-.036	-.078	.244	-.602	.155	.277
FILE71	.246	.047	.248	.291	.050	-.054

	FILE43	FILE44	FILE45	FILE46	FILE47	FILE48
FILE43	1.000					
FILE44	.678	1.000				
FILE45	.103	.302	1.000			
FILE46	.082	.059	.108	1.000		
FILE47	.219	.198	.106	.381	1.000	
FILE48	.137	.173	.170	.123	.109	1.000
FILE49	.139	.035	.067	.138	.023	.322
FILE50	.139	.175	.149	.024	.137	.142
FILE51	.133	.081	-.045	.130	.266	.269
FILE52	.256	.115	.076	.049	.051	.251
FILE53	.217	.161	.140	-.022	.083	.064
FILE54	.147	.146	.066	.012	.058	-.053
FILE55	.381	.236	.235	.196	.256	.095
FILE56	-.078	-.075	-.059	.103	-.062	.357
FILE57	.211	.003	-.056	.164	.030	.173
FILE58	.036	.119	.096	.064	.106	.083

FILE59	-.005	-.064	.194	.211	.037	.196
FILE60	.222	.176	.004	.105	-.006	.422
FILE61	.198	.193	.044	.293	.219	.056
FILE62	.059	-.074	-.049	.159	-.008	.083
FILE63	.151	.017	-.047	.153	.227	.039
FILE64	.132	.007	.091	.116	.077	.060
FILE65	.105	.061	.059	.224	.287	.219
FILE66	-.050	-.139	-.034	.040	-.057	.018
FILE67	.166	.033	-.024	.320	.323	.193
FILE68	.209	.140	-.029	.353	.258	.216
FILE69	.068	.176	.084	.385	.238	.271
FILE70	.222	-.026	.004	.105	.238	.178
FILE71	.107	-.102	-.093	-.245	.124	.095

	FILE49	FILE50	FILE51	FILE52	FILE53	FILE54
FILE49	1.000					
FILE50	.145	1.000				
FILE51	.502	.425	1.000			
FILE52	.470	.360	.756	1.000		
FILE53	.173	.552	.322	.365	1.000	
FILE54	-.075	.363	.304	.323	.286	1.000
FILE55	.318	.149	.257	.485	.274	.096
FILE56	-.142	.151	.194	.167	.205	.269
FILE57	.338	.169	.320	.218	-.036	.391
FILE58	.067	.568	.283	.000	.361	.217
FILE59	.031	.380	.212	.133	.189	.154
FILE60	.014	.071	-.109	-.054	.367	.319
FILE61	.073	.131	-.054	.019	.007	-.048
FILE62	.161	.168	.017	-.221	.106	-.027
FILE63	.008	.126	.108	.088	.271	.308
FILE64	.101	.269	.235	.307	.211	.282
FILE65	.066	.171	.192	-.041	.093	.178
FILE66	-.029	-.020	-.047	.148	-.023	.054
FILE67	.092	.132	.263	.334	.233	.245
FILE68	.126	.150	.193	.267	.247	.122
FILE69	.329	.151	.252	.312	.367	.037
FILE70	.105	.071	.252	.105	.250	-.719
FILE71	.263	.282	.161	.138	.180	.131

	FILE55	FILE56	FILE57	FILE58	FILE59	FILE60
FILE55	1.000					
FILE56	.076	1.000				
FILE57	.242	.441	1.000			
FILE58	.039	.446	.247	1.000		
FILE59	.154	.347	.422	.246	1.000	
FILE60	.137	.444	.366	.185	.261	1.000
FILE61	.219	-.024	.365	.057	.188	.388
FILE62	.148	.265	.492	.053	.184	.407
FILE63	.294	.300	.205	.068	.120	.441
FILE64	.178	.242	.265	.196	.286	.116

FILE65	.036	.362	.180	.152	.205	.421
FILE66	.237	-.050	-.778	-.089	-.182	.152
FILE67	.384	.094	.284	.185	.009	.304
FILE68	.351	.052	.236	.152	.013	.260
FILE69	.291	.265	.366	-.017	-.100	.302
FILE70	.426	-.650	-.672	-.168	-.779	.302
FILE71	.241	-.666	.132	.092	.171	.244

	FILE61	FILE62	FILE63	FILE64	FILE65	FILE66
FILE61	1.000					
FILE62	.315	1.000				
FILE63	.362	.492	1.000			
FILE64	.548	.277	.543	1.000		
FILE65	.103	.289	.262	.342	1.000	
FILE66	.127	.152	.326	.445	.019	1.000
FILE67	.331	.092	.602	.407	.164	.119
FILE68	.271	-.056	.542	.292	.162	-.105
FILE69	.180	.033	.232	-.694	.134	.152
FILE70	.296	-.721	.700	.404	.249	.361
FILE71	.305	.127	.557	.557	.168	.275

	FILE67	FILE68	FILE69	FILE70	FILE71
FILE67	1.000				
FILE68	.982	1.000			
FILE69	.590	.613	1.000		
FILE70	.655	.613	.302	1.000	
FILE71	.576	.529	.244	.764	1.000